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33, TOTHILL STREET, WESTMINSTER, LONDON, S.W.1
*Telephone: WHItehall 9233 (12 lines)* *Telegrams: "Trazette, Parl, London"*

BRANCH OFFICES
GLASGOW: 87, Union Street . . . . . *Central 4646*
NEWCASTLE-ON-TYNE: 4, Royal Arcade, Pilgrim St. *Newcastle-on-Tyne 22239*
MANCHESTER: Century House, St. Peter's Square . . . *Central 3101*
BIRMINGHAM: 81, Edmund Street . . . . . *Central 3049*
LEEDS: 70, Albion Street . . . . . *Leeds 27174*

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*DIESEL RAILWAY TRACTION*

*The June issue of this* RAILWAY GAZETTE *publication, illustrating and describing developments in Diesel Railway Traction, will be ready on June 1, price 2s.*

### Steel Rationing Ends

IN the House of Commons on May 22, the Minister of Supply announced that, except in the case of sheet and tinplate, supplies of which are not yet adequate, the rationing of steel will now end. Such regulations of exports as may still be necessary will be effected by administrative arrangements between the Government and the steel industry. Statistics of distribution of steel deliveries to the steel consuming industries will be maintained simply by requiring users to quote on their orders for steel an indication of their industrial classification. At the same time the Ministry of Supply will continue to control steel prices. For more than a year the supplies of most steel products have been sufficient to meet the demand, and recently both sides of the industry have been pressing the Government to bring to an end a system of control introduced as an emergency measure in the early days of the war and the need for which ceased to exist some time ago. When the new mills at Margam come into operation in 1951 the shortage of tinplate will be overcome and there should be no shortage of sheets when the extensions at Shotton are completed in 1952. Exports of steel have shown a substantial increase during the past six months, and the lifting of the controls will be of considerable help to the industry in meeting increasing competition abroad. Meanwhile, despite the threat of State control which still persists, the steel industry is actively engaged on a second ambitious long-term development plan.

### Wage Freeze Talks

THE fact that the national wage bill has increased by some £200 million during the past twelve months points to the difficulty of giving effect to the wage freeze policy despite frequent appeals by the Government and by the T.U.C. This point was raised by Mr. Arthur Deakin at Cardiff last Saturday when addressing a conference of tinplate workers. Mr. Deakin said that discussions with the Chancellor of the Exchequer might make it possible to raise the wage ceiling. The main difficulty was to decide who should get the increases. It had been suggested that there should be a national tribunal to which the unions could submit their claims, and, though one could not say whether the idea would work, he was in favour of it. Another matter which has come to the fore is the working of Arbitration Order No. 1305, which requires 21 days' notice of dispute to be given to the Minister of Labour before a strike is legal. This was again referred to by Mr. J. B. Figgins, General Secretary, N.U.R., over the week-end, when he stated that the N.U.R. would put on the agenda for the T.U.C. congress in September a resolution calling on the Government to terminate the order.

### Two Hundred Years of Printing

TWO hundred years of continuity in any business is a record to occasion pride in any industry. In printing, the firm of Harrison & Sons Ltd. is unique in that it is the oldest house to remain under the same family control since 1750. It is now celebrating its bicentenary. The firm holds appointments as printers to the King and to Queen Mary and undertakes a great deal of work for Government departments, including postage-stamp printing. For over 40 years Harrison & Sons Ltd. has printed *The Railway Gazette*. The periodical work of this house includes not only a number of our associated journals, but also many other technical publications. The high standard of the work performed by Harrison & Sons has earned an enviable reputation both at home and abroad. The present Chairman of the company, Mr. B. Guy Harrison, is a prominent member of the printing industry in this country, to which he has rendered valuable services, especially during the recent war.

### British Transport Commission Statistics

FOR the third four-weekly statistical period of the year, details of which appear elsewhere in this issue, British Railways mineral, coal and coke, and parcels receipts show increases over both the preceding period and last year. Passenger receipts, however, though slightly and seasonally in excess of the previous period, were markedly below the 1949 figure. Although passenger journeys in February were slightly more than last year, this was due largely to a 50 per cent. increase in excursion fare journeys (which form 18 per cent. of the total), whilst monthly return (also 18 per cent. of the total) journeys fell 14 per cent. and full fare journeys (now only 5 per cent. of the total) fell 10 per cent. First class travel is now less than 3 per cent. of the total, and fell 7 per cent. compared with last year. London Transport railways show a similar trend, in relation to that Executive's road transport. On the brighter side, British Railways efficiency statistics show an almost all-round improvement. Better user and extensive scrapping explain the slight decrease in the serviceable locomotive and wagon stock, combined with maintenance of overall performance, and if the proportion of locomotives under repair is much the same as last year, that of wagons is much less.

## British Trade Prospects in the Near East

GERMAN and Japanese competition is beginning to be felt in some Near Eastern markets, according to Mr. C. F. I. Ramsden, Overseas Director of the Federation of British Industries, who recently has toured Iraq, Jordan, Lebanon, Persia, Syria, and Turkey. In Turkey (where, incidentally, much railway development is taking place) imports from Western Germany are being sold at very low prices, probably because of German Government subsidisation, and there is, therefore, a possibility that German exporters soon may regain their pre-war ascendancy. In Persia, another country where railways are being developed, both Japanese and German competition is reported, but without any indication as to how far this affects any industry connected with railways. The development plans of some of the smaller countries include railway construction, but generally they are starved of capital, due largely to failure to collect taxes; if successful, they might divert the demand for imported manufactures from consumer to capital goods. With properly directed effort, remarked Mr. Ramsden at a recent press conference, British exporters can expand their sales, though agriculture still is the main occupation of the peoples of the Near East.

## Overseas Railway Traffics

THE improvement in Paraguay Central traffics was continued in the fortnight ended May 5, so that at the end of 44 weeks of the financial year 1949-50, there had been a total advance of G1,889,433 to G6,451,455. During the two weeks ended May 5 receipts were up by G151,891, at G349,679. Despite recent gains, Antofagasta (Chili) & Bolivia traffics again began to fall in the fortnight ended May 14, with a £6,350 decline to £126,700. On the aggregate Antofagasta receipts at May 14 were £1,156,444, as compared with £1,283,104 last year. On the Peruvian Corporation Central Railway serious landslides on April 3 and 14 interrupted traffic during that month and there was further trouble during the first five days of May. As a result there was a heavy fall in Central Railway gross receipts and for the month of April Peru traffics of the Corporation fell by $461,658 to $4,263,000. At the end of 43 weeks total Peru Corporation traffic receipts were Bs.11,761,937 higher at Bs.97,511,664 on the Bolivian Section, and $16,899,941 higher at $57,660,058 on the Peru Section.

## British Investments in Mexico

IT is nearly 40 years since, in 1910, the interest on British railway investments in Mexico was appreciable; even then it averaged only 3·2 per cent., and one quarter of the capital received no return, as is shown by statistics recently quoted by *The South American Journal*. Since then the yie'd has been practically nil. Railway investments now total £73 million. Recently, however, terms of settlement have been offered to National Railways investors, even if the interest paid will be small. An analogous, though less extreme, situation has existed since 1913 in investments other than railways. For 1949, interest averaged 2·7 per cent., and nearly 75 per cent. of the capital received no return; this means that the average return on total British investments was 0·9 per cent., with only £40 million of the £140 million capital receiving a yield, much as for the preceding three years and a slight improvement over the war and pre-war years since 1932. The settlement in 1943 on Government bonds has resulted in a trickle of interest since.

## British Transport Films

IN the belief that the national system of public transport envisaged in the Transport Act, 1947, can become fully efficient only if its objects are understood by those who use it and by those who operate it, the British Transport Commission set up a films section in the Spring of 1949, to take its part with other publicity activities in achieving this objective. The first four films to be completed were shown to an audience which included the Minister of Transport, other Ministers, Sir Cyril Hurcomb, Chairman, British Transport Commission, Members of Parliament, and Chairmen, Members and staffs of the transport Executives, at the Odeon Theatre, Leicester Square, London, as well as at Hull, on May 18. Three of the films, "Transport," "Berth 24," and "Moving House," are intended for showing at public cinemas, and the fourth "Inland Waterways," will be used for staff training and education. "Transport," which forms part of the "Wealth of the World" series being produced by Peter Baylis for Pathé Pictures is intended for wide theatrical distribution. "Inland Waterways" will have a wide circulation with the Docks & Inland Waterways Executive and will also be shown to the staffs of other Executives. A further ten films are now under production and a high standard has been set by the first four, which are in the best British documentary tradition.

## High-Capacity Wagons

AN article elsewhere in this issue discusses once more the subject of wagon size, which at intervals during the past 50 years has been a source of much argument. The article explains the difference between American operating methods, indispensable for moving great traffic volumes over long distances, and British practice, developed in very different conditions. The U.S.A. railways are finding large wagons unsuitable for carrying merchandise in small lots, which is an important section of goods transport in this country. Some of the Traders Advisory Boards in the States are concerned about the situation and in the St. Louis district are urging the railways to find a solution of the less-than-wagon-load traffic problem. If it is not solved soon, U.S.A. freight trains will be hauling nothing but through wagon loads, and the valuable "smalls" business will pass to road hauliers and airlines. British Railways are not threatened with a crisis of that nature, though their merchandise tonnage and receipts decreased last year. Their best safeguard against a further decline would seem to be an all-round acceleration of goods train working rather than the installation of high-capacity wagons for ordinary merchandise.

## Deferred Civil Engineering Works

WE have stressed on more than one occasion the manner in which the Government's policy of restricting capital investment is deferring essential engineering works required to overcome the arrears in British railway maintenance. The strain borne by the railways during the last ten years has been particularly severe for the civil engineer's department. In opening the Railway Engineering Exhibition at the Institution of Civil Engineers on May 23, Sir Eustace Missenden, Chairman of the Railway Executive, referred to the grave concern felt at the holding up of much important work as a result of Government policy. He mentioned in particular the intensive wartime damage to, and use of, the way and works, and the slow recovery enforced by a restricted economy. Despite this handicap, the civil engineers have succeeded not only in "keeping the job going," but also in sustaining the tempo of technical progress. The very importance of their contribution, however, underlines the fact that all railway work is team work; the mechanical engineer designs the locomotive to haul a heavier train more economically; the civil engineer provides the track on which it can run safely and speedily, and the operating, and signal and telegraph officers fit the train in with others to give a punctual and reliable service which the commercial and publicity officers sell to the public.

## The Railways of Japan Since the War

UNLIKE those of Germany and Italy, the railways of Japan did not suffer greatly from Allied air attack; they were, indeed, deliberately spared in view of their vital need to an invasion force, in a land with few good highways, and where coastal shipping was the only real competitor of the railways before the war. In an article in this issue,

Colonel Howard G. Hill, a well-known United States railway consulting engineer, and designer of the first steam locomotive, a 2-8-2, built in the U.S.A. in 1941 for war service with the American forces abroad, gives his impressions of the Japanese railways immediately after the war, when he surveyed them for the United States War Department. The chief drawbacks to efficiency on the Japanese railways, are the low standard of workmanship in sheds and shops, due mainly to the youth of the staff, and the poor quality of the coal, which necessitates low speeds and slow acceleration. The steam locomotive stock would appear to follow American and German practice. The civil engineering and signalling are sound. Some sections have been electrified, principally the Tokaido main line between Tokyo and Numazu, but electrification, although a seemingly obvious choice in a country where coal is low-grade, gradients are severe and the population is dense, is made rather less attractive by the undependable water power supply and the present reduced coal production.

## French Railways Summer Services

THE main changes in the French National Railways summer passenger timetables, in force from May 14, are in the South-Eastern Region, as the result of the Laroche-Dijon electrification described in our January 27 issue. There is now an almost standard time of 98 min. over the 96½-mile electrified section: this is covered in 95 min. by the "Blue Train," which also reaches Dijon, 196 miles, in 208 min. from Paris, including change of engine at Laroche. Marseilles, 536 miles, is now 10 hr. 3 min. by the fastest day express from Paris (now named "Le Mistral"), and Nice, 676 miles, 13 hr. 22 min. by the "Blue Train." The "Rome Express" now reaches Rome *via* Modane in 22 hr. 25 min. from Paris, and the "Simplon-Orient" Express *via* Lausanne brings Milan within some 13, Trieste within 21, Belgrade within 36, and Constantinople (1,880 miles), within 74 hr. of Paris; these approach pre-war timings, except for slow running beyond Belgrade. A pair of railcars continues to run non-stop between Paris and Lyons, 318 miles, in 295 min. in each direction. Certain Paris-Vichy expresses now run from Paris Austerlitz over the South-Western Region, joining the South-Eastern Region at Saincaize.

In the Northern Region the "Golden Arrow" proper, that is, the first and second class Pullmans, has been combined with the ordinary *rapide* between Calais Maritime and Paris Nord, a separate pair of trains running direct between Calais and Paris Lyon with the Riviera, Rome, and Trieste through coaches. The "Golden Arrow" is allowed 190 min. down and 194 min. up, with, in the up direction, only 18 min. for disembarkation at Calais Maritime. The "North Star" now reaches Brussels Midi (195 miles) from Paris in 210 min., with one short stop at the frontier, at Quévy. The "Nord Express" once more includes vehicles for Warsaw *via* Berlin and Frankfurt-an-der-Oder; running in Eastern Germany is slow.

The direct route *via* Laon is again used by certain Anglo-Swiss expresses from Boulogne and Calais. There are no great accelerations in the Eastern Region. Between Paris and Bordeaux, in the South-Western Region, the down evening *rapide* is allowed, with two stops, 345 min. for slightly over 360 miles, a cut of 10 min., and services generally over this electrified line have been accelerated, except the "Sud Express" itself. On the electrified Paris-Toulouse line, Toulouse, 443 miles, is reached in 8 hr. 50 min. by a heavy day *rapide* during the high season.

In the Western Region, there has been a general improvement of timings from Paris to coast resorts. The fastest times between Paris St. Lazare and Le Havre are now 128 min. down and 127 min. up for 143 miles, with a stop at Rouen. From Paris Montparnasse to Le Mans, 131 miles, there is a standard 130-min. timing non-stop over the electrified section. A through service between Cherbourg and Bordeaux connects with the new Southampton-Cherbourg steamer service.

Passenger services generally have been improved by additional semi-fast trains, and fast railcar services on secondary and branch lines.

## Nationalised Transport in Ireland

THE Irish Transport Bill, signed by the Commission of State, in the absence of the President, on May 17, will become operative on June 1, next Thursday. The date originally fixed for the nationalisation of Coras Iompair Eireann and the Grand Canal Company was January 1 last, but slow progress of the Bill through Parliament made it necessary to postpone the operative date first to April 1 and later to June 1.

The new company will retain the name of Coras Iompair Eireann (The Irish Transport Company) acquired under the Transport Act of 1944. This Act, which became operative on January 1, 1945, marked a new era in the history of Irish transport. Coras Iompair Eireann was formed by the amalgamation of the undertakings of the Great Southern Railways Company and the Dublin United Transport Co. Ltd., and thus virtually controlled all public rail and road transport in Southern Ireland except the area covered by the G.N.R. (I.).

The Act provided for a capital of £20,000,000 made up of £4,000,000 common stock and £16,000,000 3 per cent. Government-guaranteed redeemable debenture stock. The first directors to take office consisted of those persons who were directors of the two dissolved companies. The Chairman, Mr. A. P. Reynolds, appointed by the Government, had wide powers, inasmuch as no business at a board meeting could be transacted without him.

The Act provided for the setting up of a Transport Advisory Committee of five members appointed by the Government to advise the Minister of Industry & Commerce on transport facilities, charges, and so on. The Railway Tribunal was abolished and its functions transferred to the High Court on matters involving legal issues and to the Minister of Industry & Commerce on matters of fact and practice. Revision and alteration in the classification of merchandise or in maximum railway rates could be effected by an order of the Minister of Industry & Commerce instead of requiring the sanction of the Railway Tribunal. No restrictions were placed on the right of the individual to carry his own goods in his own vehicles but certain amendments to the Road Transport Acts were made to secure the better enforcement of the Acts.

In July, 1948, Sir James Milne, former General Manager of the Great Western Railway was asked by the Government to make a report on how the co-ordination of transport in Ireland could best be effected. Several fundamental alterations in transport administration were suggested in his report which was published the following December. He recommended the establishment of a Central Highways Authority for the maintenance and improvement of the highway system to which all forms of transport would contribute.

The report also suggested the appointment of at least two additional Government directors to the board of Coras Iompair Eireann, a more frequent and rapid passenger service with lighter trains and the use of diesel railcars, the curtailment of capital expenditure under many specific headings and the abandonment of the proposal to use diesel-electric locomotives for main-line traction.

It was recommended that branch lines should not be closed if their retention was necessary in the public interest, the company's wages bill cut by at least 5 per cent., bus fares increased, and the Grand Canal Company acquired by C.I.E. under powers authorised in the 1944 Transport Act. Revision of licensing arrangements was also suggested for all commercial goods vehicles.

Dealing with the G.N.R. (I.), Sir James Milne suggested that the fixed assets of the company be taken over by C.I.E. in Southern Ireland and the Ulster Transport Authority in Northern Ireland. Receipts would be divided *pro rata* but the G.N.R.(I.) should continue to operate its own rail and road services. With regard to four minor railway companies operating cross-border services and having a total track mileage of 211, it was recommended that the reconstituted G.N.R. should absorb them.

A scheme was announced by the Irish Government in February, 1949, for the nationalisation of transport and shortly afterwards Mr. Reynolds, Chairman of C.I.E.,

resigned. He was succeeded by Mr. T. C. Courtney, who had been Chief Engineering Adviser to the Department of Local Government. The declared basis of nationalisation was the acquisition of all public transport, the appointment of a Transport Board by the Government and the compensation of shareholders, with a provision to ensure that all redundant staff would be absorbed over a period through wastage occasioned in the normal course by retirement, and so on.

The basis of compensation for the security holders of Coras Iompair Eireann and the Grand Canal Company was announced in May, 1949, but no reference was made to the position of the Great Northern Railway (Ireland). In the case of the two companies to be nationalised the stocks and shares were to be converted into the same amounts of guaranteed Transport stock. The only exception to this was that the holders of C.I.E. common stock were to receive only £80 for every £100 of their holdings.

The Transport Bill, 1949, published last October, was mainly an implementing measure for bringing these two companies under public ownership. The main clauses of the Bill provided for the establishment of a new Transport Board which was to consist of a Chairman and not more than five members, all of whom were to be appointed by the Government. The Board was to have final powers for the regulation of fares and merchandise charges, train services might be terminated on any section of the line provided one month's public notice was given and an adequate road service provided. Any railway line on which train services had not been operated for a period of twelve months subsequent to the establishment date could be abandoned. A member of the Board could not be a member of either the Dail or the Senate and was precluded from holding any Irish Transport Stock. The wide powers formerly vested in the Chairman of C.I.E. were not to apply in the new undertaking and a position was made for a deputy to act for him in the event of his absence from a board meeting. Directors of either of the dissolved undertakings who were not appointed to the new board were to be compensated. The borrowing powers were to be limited to £7,000,000 and provision made for C.I.E. in its new form to acquire by voluntary arrangement any transport undertaking which was wholly or partly within the State.

During the debate on the Committee Stage of the Bill a Ministerial proposal to re-establish the Transport Tribunal (abolished by the 1944 Transport Act), was adopted. The Tribunal consisting of from three to five Government-appointed members will advise the Minister of Industry & Commerce on any matters relating to transport services and will have power to review the proposals of the board in the important matter of the closing of branch lines. Provision is also made for interested parties to appeal to the Tribunal where a discontinuance of train services is contemplated by the board. The power to fix rates and charges is, however, vested in the Board.

The section of the Bill dealing with payment of compensation to the outgoing directors of C.I.E. and the Grand Canal Company was rejected in the Dail after being left to a "free vote." The Senate re-introduced the clause, but again, on being referred back to the Dail, its inclusion was not sanctioned. An amendment on the Report stage was agreed, providing that the membership of the new board shall be not less than three nor more than seven.

The Bill as enacted contains no specific reference to the Great Northern Railway and Sir James Milne's proposal for the formation of a central highways authority has not been introduced either. The Minister of Industry & Commerce, however, during a debate in Parliament, said that these and other matters referred to in the Milne Report would be dealt with by the new board which would make recommendations to the Government on further legislation that may be necessary.

In recent weeks, statements have been made by the Ministers of both the Southern and Northern Governments to the effect that they had received a report from their technical advisers about the G.N.R., but that it required full consideration before the proposals could be formulated.

## Social and Economic Aspects of London's Transport

WHEN Sir (then Mr.) Edgar Harper wrote his paper "Statistics of London Traffic" almost fifty years ago, using material submitted to the Royal Commission on London Traffic then sitting, he had great difficulty in collecting his statistical material. He had to assemble data on twenty-eight separate railway undertakings to give an account of the London railway services, and even so, was unable to distinguish adequately between figures for local and long-distance passenger traffic.

Since then, London travel has undergone a revolution. The formation of the Underground Group was the first major step towards integration, but not until July 1, 1933, when the London Passenger Transport Board came into being, was it possible to plan for London traffic needs without regard for sectional interests. At the same time, a consistent body of statistics became available, giving reliable indices of the standard of service and the volume of traffic in the whole London Transport Area. This statistical body has not been greatly modified with nationalisation.

The Report of the Royal Commission on London Traffic, set up in 1903, is justly called "a mine of information about travel in London" by Mr. F. A. A. Menzler, Chief Development & Research Officer, London Transport Executive in a recent paper.* Some of the numerous recommendations and statements of the Report have a modern ring and are sound and far-sighted. The Commissioners recognised even then the essential differences between urban and outer-suburban railways which have lately been re-emphasised by the London Plan Working Party, hoped that before long the London suburban lines would all be electrified, and looked forward to the establishment of a London Traffic Board.

In his paper Mr. Menzler analyses the economic background of the London Transport Area, and more particularly, the population movements during the inter-war years which have brought about the problem of peak-hour travel. Between 1921 and 1939, the population of the London Transport area increased from 8,300,000 to nearly 10,000,000; more than half of this increase was due to migration from the provinces. At the same time, half a million migrated from the County of London area to the outer districts of the London Transport Area, which thus grew in population by more than two millions. These two migratory waves of population converged on the outer ring of London.

To some extent, this migration was paralleled by industrial development, as there was a net increase of over 800 factories in the London Transport Area outside the County of London. The unevenness with which industrial development is spread over London has been a main factor in creating the peak hour problem which London Transport has tried to alleviate by the "staggered hours" campaign.

Having surveyed the demographical background, Mr. Menzler deals with the basic types of travel for which services have to be provided in the London Area, distinguishing between short local journeys, mainly by road; longer journeys between the centre and the suburbs within a 10-12 mile radius, mainly by tube; and journeys to and from the outer suburbs, mainly by suburban railways. The different functions of the various means of transport are reflected in the average travelling distances, which are 2·2 miles on London Transport road services (excluding Green Line Coaches), 6 miles on London Transport Railways, and 9·8 miles on the suburban services of the Railway Executive. Tube railways, with up to 40 trains and a potential carrying capacity of 32,000 passengers an hour, are indispensable in handling the daily traffic to and from work, but costly to build—now more than £1,750,000 a mile—and the more profitable bus services must help to sustain them.

The functional differences between tube and suburban railways referred to above are also evident in the different

* "London and its Transport System," a paper read by Mr. F. A. A. Menzler, C.B.E., Chief Development & Research Officer, London Transport Executive, before the Royal Statistical Society on April 26

design of rolling stock and general layout. A mere extension of London Transport railway services reaching out 12 miles or so from the centre would not answer the demand for an improved railway service in areas further out. The Bakerloo Line to Watford is instanced as a tube service prolonged too far.

Mr. Menzler presents interesting statistics in which the trends of the various indices of transport intensity (route-miles, number of stations, number of vehicles, service car miles, and so on) are followed up since the beginning of the century, and, in part, related to the population statistics. London Transport services are increased by 14 per cent. compared with pre-war, although this figure includes surface extensions of tube services which have replaced former main line suburban services.

The "travel habit," expressed in rides per head of population per year, has risen greatly, and, more or less consistently. Compared with pre-war, the rides per head figure for all services has risen by 16 per cent. and the even more significant "passenger miles per head" by 23 per cent.

The author then deals with the problem of peak traffic which, with the high cost of tube construction, conditions the economics of local transport. The problem is illustrated by statistics, showing hourly, daily, and seasonal trend of traffic. Drawing on the data of the recently-published "London Travel Survey," Mr. Menzler shows the reasons for travel and gives particulars of the journey to work. The average door-to-door journey to work by public transport in Greater London takes 42 min., including 9 min. of walk to and from the public transport vehicle. According to the survey, the average expenditure per worker of all classes in Greater London using public transport to get to work is 4s. 1d. per week.

The paper is completed by remarks on the relationship of transport facilities and transport demands, and the influence of "planning" on this relationship. The author concludes: "Nobody will dispute the desirability of the ideal of a closer association of home and workplace in order that the strain and expense of daily travel to and from work may be minimised. Nevertheless, human nature being what it is, the lure of the metropolis will always be there and, if transport facilities to and from the centre are required to meet business and social needs, it is the duty of the transport undertakings to provide them."

## Commonwealth of Australia Railways

THE report for the year ended June 30, 1949, of the Commonwealth of Australia Railways covers the four separate railways under the control of the Commissioner: the Trans-Australian and Australian Capital Territory Railways, both 4 ft. 8½ in. gauge; and the North Australia and Central Australia Railways, both 3 ft. 6 in. gauge, the northern and southern ends respectively of the uncompleted north to south transcontinental railway. In the table at the foot of this page some of the principal results are given for each of the railways which fall under the control of the Commission.

Increases in working expenses were caused by basic wage increases and higher cost of materials generally. There has been in the past ten years a 194 per cent. rise in the price of coal, which, at 90s. per ton during the year under review, had an average calorific value of 10,000 B.T.U.'s and an ash content of 25 per cent. Services, moreover, were affected by the coal strike.

On the Trans-Australian Railway the demand for accommodation in transcontinental passenger trains was heavy; the number of through passengers was 60 per cent. greater than in 1938-39. Winter tours of Central Australia, organised in Victoria and South Australia, were well patronised. Passenger traffic to and from Canberra by the Australian Capital Territory Railway decreased slightly as the result of air competition.

Transcontinental goods traffic over the Trans-Australian Railway was lower than for the previous year, but was four times that of 1938-39. Frequent goods train services from Sydney, Melbourne, and Adelaide connect with fast goods train service from Port Pirie to Kalgoorlie and Perth. The railway freight rates compare favourably with those of coastal shipping; in conjunction with the State Railways concerned, contracts at special rates were made with firms agreeing to despatch guaranteed tonnages annually to Western Australia. The decrease in traffic is due partly to curtailment of services due to the coal strike, and partly to a shortage of bananas for export from New South Wales and Queensland. On the Central Australia Railway, general merchandise, coal, and mineral tonnages increased over the previous year. Unrestricted road competition, moreover, caused a fall in goods traffic on the North Australia Railway, which was much lower than before the recent war.

Serious coal shortage resulted in the undertaking of an extensive programme of conversion of Trans-Australian locomotives to oil burning; the converted engines gave good results, and the economies in fuel costs were being studied. As at least 20 per cent. of the total gross ton-mileage of the Trans-Australian Railway is involved in the haulage of coal and water, and the weight of the tender, loaded with coal and water, of a locomotive hauling a 440-ton (excluding tender) passenger train is 120 tons, whilst coal must be brought from New South Wales with a freight cost of 50s. a ton, the report considers that in this case the diesel electric locomotive is the obvious choice of power.

It was decided to increase the freight rates and fares to and from Western Australia as from December 1, 1948; the increases in freight rates ranged from 25 per cent. on lower-class goods to 40 per cent. on the higher classes. Passenger fares were increased by a flat rate of 25 per cent., with certain exceptions. The report draws attention to unnecessary duplication of passenger services by buses licensed by the Transport Control Board of South Australia, competing with the Trans-Australian Railway. Unrestricted road freight haulage in the Northern Territory, and reduced shipping services with Darwin, have resulted in goods for Darwin being road borne by private operators from Alice Springs, the terminus of the Central Australia Railway, by-passing the Northern Australia Railway; pending remedial legislation, the Commonwealth Railways are arranging co-ordinated rail-and-road services to and from Darwin.

| — | Year. | Trans-Australian Railway. | Central Australia Railway. | North Australia Railway. | Australian Capital Territory Railway. | Total for all railways. |
|---|---|---|---|---|---|---|
| Miles open | 1948-49 | 1,108 | 771 | 316 | 5 | 2,201 miles |
| Cost (excluding rolling stock) | 1949 | £8,750,148 | £4,519,526 | £2,674,642 | £88,922 | £16,033,238 |
| | 1948 | £8,579,785 | £4,487,959 | £2,673,131 | £87,399 | £15,828,274 |
| Cost of rolling-stock | 1949 | £1,604,467 | £621,405 | £133,411 | * | £2,359,283 |
| | 1948 | £1,592,708 | £615,771 | £131,411 | * | £2,339,890 |
| Earnings | 1949 | £915,672 | £714,838 | £29,251 | £13,541 | £1,673,302 |
| | 1948 | £781,566 | £405,250 | £37,540 | £12,688 | £1,237,044 |
| Working expenses | 1949 | £1,050,492 | £657,153 | £51,402 | £17,566 | £1,776,613 |
| | 1948 | £890,043 | £484,549 | £49,645 | £14,780 | £1,439,017 |
| Revenue train-miles | 1949 | 903,093 | 685,648 | 69,598 | 8,655 | 1,666,994 |
| | 1948 | 903,139 | 631,636 | 57,991 | 9,175 | 1,601,941 |
| Results of working (excluding interest) | 1949 | — £134,820 | + £57,685 | — £22,151 | — £4,025 | — £103,311 |
| | 1948 | — £108,477 | — £79,299 | — £12,105 | — £2,092 | — £201,973 |
| Interest | 1949 | £107,742 | £135,472 | £65,383 | £972 | £309,569 |
| | 1948 | £108,611 | £139,639 | £67,828 | £993 | £317,071 |

* Rolling-stock is the property of the New South Wales Railways

# LETTERS TO THE EDITOR

*(The Editor is not responsible for the opinions of correspondents)*

## Freight Charges Increase

May 19

SIR,—In your report of the Debate on Railway Freight Charges Increase in the House of Commons on May 10, I gather that no speaker referred to the inconsistent attitude of the Government in this and other matters.

When the £ was devalued and manufacturers sold their goods for about two-thirds the number of dollars previously received, it was represented that the resultant increased sales would more than compensate for the reduced prices. Again we were told that the removal of the purchase tax would result in a great increase in purchases.

Accepting these arguments, how can the Government expect to get increased railway revenue by largely increasing railway rates? Industry is now faced with a great increase in freight charges while the National Coal Board has already announced an amazingly large increase in the price of coal, which will further add to industrial costs.

Anyone familiar with the railways in past years could suggest many economies—perhaps starting with the swollen staff of the Railway Executive.

Yours sincerely,

EX-GENERAL MANAGER

## Locomotive Liveries

May 15

SIR,—Mr. C. V. Dalton is not alone in his disappointment in so far as new liveries for locomotives are concerned. I agree that the blue colour at present being applied is too dark and I suggest to the Railway Executive that the old "Caledonian" blue colour would be an improvement. It is realised, of course, that cleaning is not what it was, and it is doubtful whether under present conditions an original colour would be maintained for any length of time.

I think that the present type of red as part colour of long distance trains requires reconsideration. I suggest the old Midland maroon, which I consider an improvement on the present application.

Yours faithfully,

A. HASTIE

Caledonian Club, 9, Halkin Street, S.W.1

## Restaurant Car Meals

May 13

SIR,—Your issue of April 28 included mention of the official announcement by the Hotels Executive that passengers who desire a "short breakfast" on restaurant car trains may now obtain this facility for 2s. 6d., instead of the full breakfast at 3s. 6d. No similar publicity has been given to the intention of the Hotels Executive, with the introduction of the summer train services, to increase the price of a full breakfast from 3s. 6d. to 4s. 6d., and of luncheon and dinner on the trains from 3s. 6d. to 5s. This information may be found discreetly tucked away in a corner of each of the new timetable books.

An increase of nearly 40 per cent. at one stroke in the price of a meal is heavy, and though it may be of little concern to business men travelling with their expenses paid, it will rule out the possibility of taking a meal on the train to many less fortunately placed, for a gratuity of 1s. no doubt will be looked for, and, with minimum drinks, lunch or dinner thus will cost at least 7s. or 7s. 6d. in all.

This is one of the inevitable results, no doubt, of placing the restaurant cars under the Hotels Executive rather than the Railway Executive, for whereas the railways, before nationalisation, could regard any moderate loss on their train catering as part of their working expenses in providing the amenities that make travel attractive, the independent Hotels Executive has no other option than to try to make its services pay. One wonders whether these inflated charges for meals may eventually result in loss rather than gain, because of the reduction that they will effect in the number of those taking meals.

The situation might be eased somewhat by an extension of the service of light refreshments in the restaurant cars before and after *table d'hôte* meal hours, and possibly, with rather less emphasis on drink and rather more on food than in the much-criticised "tavern cars," to rearrange some of the restaurant car sets in such a way that they cater for *à la carte* meals at reasonable prices on one side of the kitchen, and *table d'hôte* meals at full prices on the other. This would do something to bridge the gap between the present "morning coffee" and "afternoon tea" and the high-priced full meals just mentioned, and would meet the needs of a large section of the travelling public.

Yours faithfully,

CECIL J. ALLEN

70, Rowlands Avenue, Hatch End

## Belfast & County Down Abandonment

May 5

SIR,—In common with many other railway enthusiasts I was very sorry to see 80 per cent. of the Belfast & County Down system closed to all traffic. County Down may be an area where the bus has advantages, but even so it seems short-sighted to let all these miles of track rot away. Even if traffic were light one would have thought that it would have been possible to keep the line open for a weekly or twice-weekly goods or for an occasional excursion, to enable the line to be ready in the event of an emergency. For instance, in bad weather it is always road transport which comes to a standstill first.

If the Western Region of British Railways can see its way to keeping open the Pontrilas-Dorstone branch, which passes through the thinly-populated Golden Valley and terminates at a small village, surely the B.C.D.R. could have been kept open for goods traffic.

The abandonment now renders large areas of County Down dead as far as railway communication is concerned. An area without railways cannot possibly be developed industrially or agriculturally on a large scale.

Yours truly,

J. F. BURRELL

80, Longmead Avenue, Bristol, 7

## Railway Fares

May 4

SIR,—In his letter in your April 28 issue, Mr. J. H. Laundy charges me with saying that standard fares had been generally reduced. I have never said anything of the sort—as is evidenced in his opening paragraph quoting me as saying that in every case where rates and fares had been reduced, the railways had recovered traffics from the roads and increased their receipts.

He then enquires how I can reconcile my statement with the fact that the railways have applied to increase rates and fares. I cannot—except by attributing it to the mentality of the accountants in the administrations and the Rates Tribunal. One day they reduce rates and recover the traffics, and the next day they want to raise them again to force the traffics back on to the roads!

The new increase can only result in "cream" traffic again falling into the hands of motor transport, leaving practically the whole of the increase to be borne by coal, iron ore, and other traffics which are tied to the railways, and least able to bear them.

Mr. Laundy claims that with medium and long-distance traffic a reduction of fares to road levels could not possibly attract sufficient passengers to compensate the loss by reducing ordinary fares. Then how does he account for

the enormous and ever-growing increase in excursionists, the receipts from whom, however, are probably all swallowed by the cost of advertising them, and by the heavy additional expense of running these unnecessary extra trains, while all the ordinary trains are running to the same places, practically empty, every day in the week? Far better to reduce ordinary fares, and earn good money, by allowing passengers to travel when and where they please, than allow them to continue running nearly empty and earning next to nothing.

Mr. Laundy further says, "Whoever heard of such nonsense as the railways competing to beat road transport in services and prices?" Whoever, indeed! Perhaps he will tell us why the railways continued reducing rates and fares, to recover the competitive traffics from the roads.

Meanwhile, hundreds of thousands of empty seats are being hauled about the country every day in the week—losing a large part of £110,000,000 of competitive traffic in the London area only—because these short-sighted accountants object to reducing ordinary fares and season ticket rates. Consequently, it is not a bit of good trying to integrate transport, or fix rates at a permanent standard level, until they have been generally reduced to proper competitive levels—as every newspaper in the country has been urging them to do.

Yours faithfully,

E. R. B. ROBERTS

Eynesbury, St. Neots

## Wagon Turn-Round

May 12

SIR,—With regard to Mr. A. J. Parkes's letter in your May 5 issue, while I go nearly all the way with him in theory, it remains a fact that it is difficult to legislate in advance of public opinion.

Public opinion today is in favour of full employment, and if anyone still believes that public opinion has learned the lesson of the Industrial Revolution let him consider the result of any attempt to introduce a machine or some modified form of working which will have the effect, for however limited a time, of causing any number of workpeople to be made redundant.

The larger the organisation the greater the resistance, not from the men's leaders, as their jobs are not in jeopardy, but from the men themselves. How much more rapidly should we progress if the man who was made redundant could go home to his missus and say "I am redundant but . . ." instead of having to say "I am redundant so . . ."

Yours faithfully,

A. RALPH WILSON

King gate, North Park, Gerrards Cross

May 4

SIR,—Mr. E. R. B. Roberts has not given details of the wagons he has in mind, such as overall dimensions and estimated tare of a 40-tonner, with what he considers to be a good 20-tonner on four wheels. He seems to favour bottom discharge and also has noted with approval the L.M.S.R. bogie wagons introduced about 1929. However, he now tells us that the height is to be no greater than the common high-sided coal wagon, and to most people this will mean about 8 ft. 9 in., which applies to most former private owned wagons and the G.W.R. steel 20-ton wagons introduced as a standard for South Wales.

Restricted in this fashion, the L.M.S.R. wagon would probably exceed 50 ft. over buffers and have a load-tare ratio no better than a 12-ton unit. Furthermore, the swing over on curves might impose other limitations on the design.

Worthwhile economies in length and tare can be achieved only by gaining as much height as possible and this is particularly essential when a bogie hopper wagon is under consideration, hence the 10-ft. 9-in. measurement of the L.M.S.R. examples which restricts them to selected pits for loading. This question of height has long been a stumbling block, and it must inconvenience Mr. Roberts's argument to find the difficulties were largely surmounted only in that part of the kingdom where a railway was responsible for providing all coal wagons; and so far as I am aware no lavish rebates were necessary as inducement.

Mr. Roberts said nothing in your April 14 issue to refute my charge of ignorance as exemplified in his statement that 80-ton locomotives regularly traversed all private sidings—no chance remark, as he has used it on other occasions. His references to shipment coal may well clinch the matter for many who are acquainted with the coastal and short sea trades. I do not propose to show why, the limiting features of these trades being diverse in cause and effect.

I think Mr. Roberts has erred badly about Seaham Harbour, both historically and in the inference he draws from the chauldron wagons. The survival of the latter in what was always a highly competitive trade within an area which for long gave a lead to the use of large wagons cannot be dismissed so lightly. It is evident that things other than the merits of a wagon as a vehicle have to be reckoned with, and distance is one. That four-ton lorry might well be displaced by a mechanical horse and two trailers!

Yours faithfully,

H. BELL

159, Stamford Road, Audenshaw

May 5

SIR,—Mr. Roberts, who in his letter in your issue of April 14, seems to think that bogie wagons would get round the curves to be found in some works, would be well advised to do as has been suggested—go and look at some of these places, of which he has obviously no conception.

One must take things as they are; they cannot be changed suddenly by the wave of some magic wand, as Mr. Roberts seems to think. The process is, of necessity, slow and costly. There was a rebate on the use of large wagons 25 years ago but it doesn't seem to have filtered through to Mr. Roberts yet. What Messrs. Worrall and Bell, "Traffic Apprentice" and others have been trying to get Mr. Roberts to understand is that old as some of the works, collieries, and so on, may be, these places must be modernised first, because in their present state the much-desired larger wagons that everyone would like to see cannot be used there.

As the worst cases are dealt with, larger and better wagons can be used. Everyone knows that these places are difficult to work, the trouble is replacement, particularly in these days of scarcity of money and material.

He was suggesting a hasty jump from the middle of last century to the middle of this. One would have thought he would have dwelt with loving care on this period, considering that G.W.R. had a gauge of 7 ft. and wagons that should have gladdened his heart. Not a bit of it! No mention of the many years of experience, just forget it quickly! Studying American methods elsewhere is one thing; why not study ours here?

Mr. A. J. Parkes has apparently got the names cross-connected in your issue of May 5. As far as I recollect, nobody has ever suggested that small wagons were desirable or that larger ones were not better.

Yours faithfully,

COURTENAY BARRY

The Old Manor, Salisbury

[In view of the very large number of letters which has been published on the above subject in recent months, further correspondence must be deferred at least for the time being.—ED., *R.G.*]

CORRECTION.—The names of two correspondents in our May 19 issue were transposed, due to a printer's error, although their addresses appeared under the correct headings. The letter headed "Liverpool Street Station" should have been attributed to Mr. R. M. Palmer and that headed "London and Bristol Services" to Mr. J. F. Burrell.

# THE SCRAP HEAP

### Sinking Ship?

Transport.—Fully trained Railway Transport man (30), A.M.Inst.T., seeks responsible post in industrial firm. —Write Box Z.495, The Times, E.C.4.—*From "The Times."*

### Object Lesson

While waiting for a train at a local station the other evening I chatted with an official who was mounting guard over a number of mail-bags containing parcels. He was eloquent and indignant over the public's carelessness in the packing of parcels. "They think a bit of brown paper and a few inches of string will hold anything together," he said.

Then one of his colleagues hailed him from the opposite platform. "Let's have 'em, Harry," shouted the colleague. Harry picked up a heavy bag, braced himself with feet apart, gave a mighty swing to the bag and launched it into mid-air. It sailed in a beautiful arc across two lines of metals and landed with a crash on the other platform.

Harry returned to his grievance. "I tell you," he said, "a bit of brown paper isn't enough." "No," I said. "I see."—*Northerner II in "The Yorkshire Post."*

### Officialdom

An Edinburgh lady was travelling recently in a train from The Hague to the Hook of Holland. Opposite her sat a young couple who, among their luggage, had a big bunch of tulips.

Some time before the train reached its destination an official looked into the compartment. His eyes lighted on the tulips. He picked them up and marched off with them. It made the lady angry to think that nowadays even flowers could be impounded at international boundaries—no doubt on the pretext that they might harbour some kind of infection.

Unable to contain her rage she turned to sympathise with the couple deprived of their bouquet. They told her that she had misconstrued the situation. The conductor, at his own suggestion, had come to take the flowers to the front of the train so that he could place them in water, in the dining car, in order that they might be kept fresh for their owners.—*From "The Scotsman."*

### "An Executive Has Nothing To Do"

As everybody knows, an executive has practically nothing to do. That is except:—

1. To decide what is to be done: to tell somebody to do it: to listen to reasons why it should not be done, why it should be done by somebody else, or why it should be done in a different way, and to prepare arguments in rebuttal that shall be convincing and conclusive.

2. To follow up to see if the thing has been done; to discover that it has not been done; to listen to excuses from the person who should have done it and for some reason did not do it.

3. To follow up a second time to see if the thing has been done; to discover that it has been done incorrectly; to point out how it should have been done; to conclude that so long as it has been done, it may as well be left as it is; to wonder if it is not time to get rid of a person who cannot do a thing correctly.

4. To consider how much simpler and better the thing would have been done had he done it himself in the first place; to reflect sadly that if he had done it himself he would have been able to do it right in 20 min., but that as things turned out he himself spent two days trying to find out why it was that it had taken somebody else three weeks to do it wrong; to realise that such an idea would strike at the very foundation of the belief that *an executive has nothing to do.—From "South African Trade and Industry."*

### Special for the Canon

Bouquets for British Railways are rare enough to be noteworthy. Canon Charles Hemming, Mottisfont Rectory, Hampshire, writes of his adventures between Waterloo and Andover.

The Canon and two other passengers were so late, owing to the havoc caused earlier in the week by blizzard, that they were stranded at Andover.

He writes: "There were three of us who wanted to go on, a passenger for Stockbridge, one for Horsebridge and myself for Mottisfont. They ran a 'special' for us, making it possible for us to get home. Do you call that nothing?"

Indeed not—but it might have been cheaper if the railway had organised a car.—"*Peterborough*," *in "The Daily Telegraph."*

[*Reproduced by permission of the proprietors of "Punch"*

### Ready to Serve

Improvisation has put the L.M.R. at the head of the popularity list with one recent passenger. He was travelling by the 12.30 p.m. from St. Pancras, and after the train had started asked the travelling ticket collector if there was any way of getting a meal, as he had missed lunch in London. The collector said he would do his best. When the train drew into Leicester a young lady brought an appetising cold lunch. He appreciated this "very efficient service" so much that he wrote a letter to the District Officer, Sheffield, to put the matter on record.—*From the "British Railways Magazine."*

### On the Wagon

Birds, too, are having their housing difficulties. The other day, when making an inspection at a railway marshalling yard a few miles out of Liverpool, I came across at least a score of nests in various stages of construction. The "housing site" in every case was the corner formed by the buffer-beam and sole bar, or bottom girder, of the many wagons waiting to be moved into Liverpool Docks.

All these the shunter with me ruthlessly swept to the floor, my protests being silenced with an unexpected: "I allus do that unless there's a nest wi' eggs in. I let that be then, 'cos t'mother bird 'll see as she goes wi' th' eggs when t'wagons go down to t'docks. Th' owd feller doesna' often go wi' 'em, though, and that's why, apart from saving t'little beggars wasting their time in building when t'wagons move before t'nests are finished. I try to force 'em to build in bushes."—*From "The Manchester Guardian."*

### The Good Samaritans

Who never shirk the sternest call,
How, when or where it may be made?
Who, but those good friends of us all,
The Ambulance Brigade?

Who, in the cause of brotherhood,
Labour incessantly, unpaid,
Glad of the chance of doing good?
The Ambulance Brigade.

When, from the blue, disaster knocks
And human hearts recoil, afraid,
Who soften the first, sudden shocks?
The Ambulance Brigade.

Let them be held in high regard
Wherever worthiness is weighed;
They find in service their reward,
The Ambulance Brigade.

For all their gifts of heart and hand
And human kindliness displayed,
God bless this noble-natured band,
The Ambulance Brigade.

In chivalry and *haute noblesse*
And honours that can never fade
Christ's almoners they rank, no less,
The Ambulance Brigade.

A. B.

# OVERSEAS RAILWAY AFFAIRS

*(From our correspondents)*

## PAKISTAN

### Budget for 1950-51

For the third time in succession since the inception of Pakistan on August 15, 1947, Mr. Ghulam Mohammad, Finance Minister, presented a surplus budget to the National Assembly. The vital part played by the railways in the economy of the country is indicated by the fact that the gross traffic receipts of the railways alone are expected to be about Rs. 37 crores (£37,000,000 approximately), or more than one quarter of the total revenues of the State. The working expenses for the year are expected to be Rs. 33 crores (£33,000,000) and they are therefore expected to yield a net profit of Rs. 4 crores (£4,000,000) in 1950-51.

### Works Programme

An expenditure of Rs. 12 crores (£12,000,000) for overdue replacements and renewals of existing assets has been provided for in the 1950-51 Works Programme. Of this, Rs. 7 crores (£7,000,000) is on account of new works, and Rs. 5 crores (£5,000,000) in respect of works which are chargeable to the depreciation fund.

### New Lines

To keep pace with the development plans of the country, provision has been made in the Budget for the survey and construction of new lines in Western and Eastern Pakistan.

### Rolling Stock Programme

The rolling stock programme includes the purchase of 63 metre-gauge and 81 broad-gauge, lightweight, all-steel coaches of modern design. If these prove suitable, more coaches of similar design will be acquired.

Twenty-three broad-gauge and 39 metre-gauge diesel-electric locomotives are also proposed to be purchased in replacement of average stock. These are expected to provide better, faster, and cheaper service, and also to make the railways largely independent of coal. Provision has also been made for the purchase of 1,500 metre-gauge wagons primarily for the movement of jute from the interior to the Port of Chittagong.

### Coal Requirements

During the first nine months of 1949-50, the coal requirements of the railways were being met fairly regularly from India, except that most of the quantity for the North Western Railway was being received by the sea route from Calcutta to Karachi, costing an extra Rs. 1,29 crores (£1,290,000) to December, 1949. Immediately after the devaluation of the Indian rupee, India increased the price of coal. Shortly after, all coal supplies to Pakistan from India ceased without previous notice. Alternative arrangements were therefore made to obtain supplies of coal from the United Kingdom, Poland, France, Belgium, and South Africa. At the same time, the railways went ahead with their scheme of conversion of locomotives from coal to oil-burning. There are now more than 425 oil-burning locomotives in service. More are being converted and additional tank wagons have been provided for.

### Port Facilities

The Government has given the highest priority to the development of the Chittagong Port. At a cost of over Rs. 66 lakhs (£660,000) short-term plans have already been executed during 1949-50, more than doubling the previous capacity of the port. The full plan for the development of the port includes the construction of eight additional jetties and the construction of new transit sheds and roads. The execution of the complete plan which will cost Rs. 14½ crores (£14,500,000) has been spread over three years. Expenditure on the development of the port during 1950-51 is estimated at Rs. 37·3 crores (£37,300,000).

### Residential Accommodation

During 1949-50, 2,723 houses were built for employees, at a cost of Rs. 52 lakhs (£520,000), to ease the acute shortage of housing accommodation. This year again a sum of 85 lakhs (£850,000) has been provided in the budget for the construction of about 2,800 houses for railway staff. In addition to construction of houses, the Government has advanced substantial sums of money to Government servants, to enable them to build their own houses.

In all, the Government has already spent in 1949-50 and will spend in 1950-51 on residential accommodation for its staff in various departments, including the Railway Department, Rs. 2·62 crores and Rs. 3·01 crores, respectively.

## ARGENTINA

### Rio Turbio Coal

The Ministry of Industry & Commerce has announced that coal from the Rio Turbio mines is being used with considerable success in the power house which supplies the General Mitre Railway with current for the electric suburban services. Transport of the coal from the mines to the port of Santa Cruz is at present being effected by Sentinel steam road locomotives, although the construction of a railway between these two points is under study, as mentioned in our issue of November 4, 1949.

### Trade Agreements

A 2,000 million peso trade agreement with Western Germany has recently been signed in Frankfurt by virtue of which shipments of Argentine produce will be counterbalanced by exports of iron, steel and machinery from Western Germany. Under the latter head, the largest item will be locomotives for the Argentine National Railways. It is not stated if these locomotives will be steam driven, and if so, how this will tally with the frequently-announced policy of complete dieselisation.

A further trade agreement recently signed with Hungary provides for the import of railway equipment to the value of U.S. $12,300,000.

### New Air-Conditioned Coaches

The Ministry of Transport states that the General Mitre Railway is building new air-conditioned passenger coaches in its Rosario workshops, but no details are yet available as to the number of coaches or the type and origin of the equipment to be installed, or on what services the coaches will be used.

### Selective Train Control

The Buenos Aires Provincial Railway has been authorised by decree to instal selective train control on all its lines.

### Passenger Traffic in 1949

The General Roca Railway has announced that in 1949 it carried 14 million more passengers than in the previous year. The General Belgrano Railway reports an increase from 37,490,000 to 46,000,000 during the same period.

## IRELAND

### Radio Train to Killarney

Over 250 passengers travelled on the first public trip of the C.I.E. "Radio Train" from Dublin to Killarney and back on May 7. The train left Dublin at 9.30 a.m. and returned to Amiens Street at about 11 that night.

The commentator on the train, Mr. Terry O'Sullivan, of Radio Eireann, conducted a "Newcomers" programme and a quiz, and gave a running commentary on the beauty spots passed through on the journey.

The general arrangements for the trip were carried out by Mr. Frank Finn, Assistant Public Relations Officer, C.I.E. An impromptu concert was held during the journey.

## FRANCE

### Expenditure Criticised

The Council of the Republic, in a report drafted by M. Pellenc, proposed to cut railway expenditure by fr. 6,000 million (about £6,000,000). M. Pierre Tissier, President, S.N.C.F., had prepared a reply, which was circulated before the debate began. In reply to critics and to M. Pellenc's strictures on the railway administration, M. Chastellain, Minister of Transport, defended M. Tissier's right to act on his own initiative as head of the S.N.C.F.

M. Pellenc, in his report, had charged the S.N.C.F. with devoting reconstruction credits to pay for operating costs. M. Tissier replied that the S.N.C.F. had a right to receive reparation for war damages, as any other victim of the war. He denied that the S.N.C.F. had

received fr. 265,000 million in 1949, as alleged by M. Pellenc, and, in fact, it had received from the government for that year only fr. 140,800 million. M. Tissier admitted that the estimated railway deficit for 1950 is now fr. 96,000 million.

M. Tissier referred to the rolling stock received between January 1, 1944, and December 31, 1949; this included 1,841 steam and electric locomotives, 101 diesel locomotives, 91 railcars, 168 passenger steel coaches, and 69,319 goods wagons. He stated that he agreed with M. Pellenc on the proposals; the drafting within three months of a "reform of structure" (reorganisation plan); a programme of reconstruction to the extent still required; and a statement of the use of all credits accorded the S.N.C.F. in 1950. He objected to the reduction of fr. 6,000 million in reconstruction credits for 1950, which he stated was impracticable because it would come in May and that the cancellation of current railway orders would involve compensation payments almost equalling the cut in credits.

## SWITZERLAND

### Railway Replaced by Road Service

The steam-operated line, standard-gauge and single-track, between Männedorf and Wetzikon, 13·9 miles long, in the north-east, was closed on May 14, when both passenger and goods services were replaced by road motor services. Männedorf is 14·9 miles east of Zurich on the electric line from Zurich along the northern shore of the Lake of Zurich as far as Rapperswil and Uznach. The closed line, leading from Männedorf in a north-eastwards direction, was opened in October, 1903, and belonged to Verkehrsbetriebe des Zürcher Oberlandes (Zurich Oberland Transport Undertakings), which owns and operates transport services totalling about 32 route-miles, of which the road service which has replaced the railway accounts for 12½ miles.

## BELGIUM

### New Bridge on Charleroi Line

A flyover has been built at Mombaerts to carry two tracks from the marshalling yard of Monceau across the four tracks of the Brussels-Charleroi main line. Its construction became necessary with the electrification of one pair of main-line tracks and the increase of the service which would not permit frequent crossing movements of goods trains on the level. Because of the proximity of the marshalling yard, this bridge had to be on a pronounced skew, forming an angle of 19 deg. 6 min. with the centre line of the electrified tracks.

The bridge consists of two spans, supported by two concrete abutments and one central pier, between the electrified and non-electrified tracks. The foundations are 10 ft. below rail level. The bridge is flanked by 420-ft. long reinforced concrete retaining walls. The foundation works required 140,000 cu. ft. of concrete and 130 tons of steel reinforcement.

The superstructure consists of two single-track straight-girder through spans approximately 118 ft. long over the steam-worked lines and 127 ft. over the electrified roads. The main plate-girders, which are 10 ft. 8 in. deep, are riveted and have two assembly joints. The cross-girders and stringers consist of broad-flange beams. Over the abutments, care has been taken to avoid sleepers resting both on the steel structure and on the abutment, due to the skew. The superstructure has, therefore, been extended by an approach system of the braced stringers, triangular in plan, resting on five subsidiary supports. The mobile supports of the four single-track structures are arranged on the central pillar.

Because of supply difficulties, the contractors (Baume et Marpent) had to carry out the erection and painting of the 730 tons of steelwork in 4½ months. For this purpose three electrically-operated steel-mast cranes of 59 ft. range and a fourth crane of smaller dimensions were used to handle the steel parts on the site. Steel trestles were used for the support of the assembly joints. Two compressors were available to enable five teams of riveters to drive 35,800 rivets in 65 days.

## Publications Received

*Modern Locomotive Classes.* By Brian Reed. London: The Locomotive Publishing Co. Ltd., 88, Horseferry Road, S.W.1. 11 in. × 8½ in. 64 pp. Illustrated. Paper covers. Price 7s. 6d. —The author has sought to give a record of the locomotive position in Britain at the end of 1947 when the four main-line railways were nationalised. Representative locomotive types of all four groups have been selected and each is described and illustrated by outline drawing and photographic reproduction.

*Der Strassenbahn-Güterverkehr in Deutschland* (*The Goods Traffic of Urban Tramways in Germany*). By Dr. Walter Boesmann, Dipl.-Volkswirt. Erich Schmidt Verlag, Herforder Strasse 10. Bielefeld (21a), Germany. 8¼ in. × 5¾ in. 174 pp. Paper covers. Price DM 9·80. Urban tramways in many Continental towns are so much alive and there is no intention to remove them in the near future. This is mainly because, unlike many in this country, they form well planned, comprehensive networks with the benefit of wider and straighter streets, often with separate right-of-way and less intensive motor traffic. That many Continental urban and interurban tramways also convey goods traffic is less well known. This book is a comprehensive and objective survey of the freight-carrying activities of German city tramways. The author recognises the limited and time-conditioned value of this kind of transport, which is mainly, though not wholly, the result of war emergencies. In some cases, however, industrial goods traffic carried by tramway vehicles dates back to the turn of the century and still flourishes. During the first world war, tramways began to carry market produce, and so on, and the Berlin tramways continued, until 1930, the large-scale transport of mail between principal post offices. During the second world war urban tramways in Germany were used to overcome petrol shortage. Large-scale transport of bulk goods and even of "smalls" was organised. In Munich, the tramways undertook collection and delivery of parcels as agents of the State Railways. In some cases, as in Berlin, trams were even used to haul other road vehicles. In some cities, such as Hamburg, trams are being used to remove *débris* from devastated areas. The author provides a historical survey, and also tries, through an analysis of rates and costs, to determine which freight-carrying activities can survive the return to normality.

*Holidays in Scotland*, 1950.—The Scottish summer holidays programme of Thos. Cook & Son provides for a wide variety of holidays in all parts of Scotland, including Skye and the Outer Hebrides, with combinations of tours in Scotland combined with the English Lakes and North Wales. Facilities are provided for attending the Edinburgh Music & Drama Festival in August and September. Overseas visitors especially will be attracted by air tours to Edinburgh, and round the British Isles calling at Orkney and the Shetlands.

*Motoring in Norway.*—A guide to motoring roads in Norway with photographic illustrations of mountain and fiord scenery is now obtainable at a price of 1s. from the Norway Travel Association, 21-24, Cockspur Street, London, S.W.1. The booklet describes all main tourist routes in Norway, with details of mileage and kilometrage, height above sea level, and indicates filling stations and repair depots.

*Education and Training in the Steel Industry.* Published by the British Iron & Steel Federation, Steel House, Tothill Street, London, S.W.1. Price 2s. 6d.—This report of the second conference on Training in the Steel Industry held in October, 1949, deals with the training of junior operatives, clerks, and foremen. It summarises the concluding speech of the Chairman, Mr. Gerald Steel, Managing Director of the United Steel Companies, who declared that complete sincerity on the part of every foreman and manager was essential if such experiments in human relations as welfare, education, and joint consultation were to succeed. A further Education & Training Conference is to be held next October.

# The Ever-Green Subject of Wagon Size

*Volume of post-war traffic exceeds expectations*

*(By a Correspondent)*

IN his address to the Darlington Chamber of Commerce on March 28, Sir Cyril Hurcomb, Chairman of the British Transport Commission, referred to the attitude of the B.T.C. to the use of high-capacity wagons on British Railways. This address formed the subject of an editorial article in *The Railway Gazette* of March 31 in which occurred the phrase "the ever-green subject of wagon size," which has attracted some attention in the U.S.A. For some time, also, this subject has enlivened our correspondence columns. The statement by Sir Cyril Hurcomb may not satisfy the advocates for big wagons, who harp on the example of the U.S.A., and it is, therefore, proposed to review in this article the position on the U.S.A. railways and compare it with conditions on British Railways.

During the war the U.S.A. railways met an unprecedented strain on their resources with remarkable success. While they were dealing with record volumes of wartime traffic, the Association of American Railroads prudently set up a strong committee to survey general economic and transport trends in the United States, with particular reference to post-war prospects. After careful study of all relevant factors, the committee submitted in January, 1946, estimates of the prospective ton-miles which the railway would work in the years 1947 to 1950. The accompanying table, comparing these estimates with actual performance, shows that the volume of post-war traffic far exceeded expectations.

**U.S.A. RAILWAYS TON-MILES**

(Millions)

| | (1) Estimate of the committee for freight, mail, and parcels | (2) Actual for freight only | (3) Percentage excess of (2) over (1) |
|---|---|---|---|
| 1947 ... | 458,000 | 655,000 | 43 |
| 1948 ... | 478,000 | 639,000 | 33 |
| 1949 ... | 490,000 | 530,000 | 8 |
| 1950 ... | 496,000 | — | — |

The forecasters did not sense the burst of productivity in agriculture and industry which raised railway ton-miles to a peacetime peak in 1947. A decrease of 2·5 per cent. in 1948 was followed by a further fall of 17 per cent. in 1949, but last year's ton-mileage was 59 per cent. above the 1939 level. In contrast to these wide variations, ton-miles worked by British Railways were nearly 3 per cent. higher in 1948, and again increased by 1·7 per cent. in 1949, being then about 18 per cent. above the 1937 level owing to the average haul being longer.

While general tendencies which influence freight traffic may not differ widely in the States from those at work in Great Britain, the resulting fluctuations in the volume of business are more acute on the U.S.A. railways. Even seasonal variations in forwardings are apt to be extreme in America. The wheat harvest is an example of the irregular demand for transport which entails special planning each year. In early Spring the U.S.A. railways begin to arrange the supply of box wagons for the ripening crop. This year, they will have to haul 270,000 wagon loads of 1949 grain, which is stored and must be moved to make way for the new crop. The backlog of old grain varies from year to year. A portion of each season's crop may be held in storage for as long as three years, so that the railways cannot calculate the transport required currently from the estimated yield of the new crop.

### Stoppage in Transit

Another peculiar feature of grain carriage is stoppage in transit through the use of privileges such as milling-in-transit or storage-in-transit. In all, the U.S.A. railways originated 823,200 wagons of wheat in 1947 and 794,100 in 1948, a difference of 29,000 or 3·5 per cent. The average wagon carried about 52 short tons. Clearly, 12-ton box wagons would be impossible for a bulk movement of that size, but British harvests do not raise comparable problems for our railways.

The coal and ore passing to and from the Great Lakes region furnish the U.S.A. railways with a large tonnage which is concentrated into an open water period of 8½ months and is subject to violent changes. There is nothing in this country resembling this traffic. As many as 60 million tons of coal have been moved northward from the lower lakes in one year, but this year's programme covers the movement of 50 million tons of coal from West Virginia, Kentucky, Pennsylvania, and Ohio through Lake Erie ports to places on the upper lakes.

During the 1949 open water season, the quantity shipped was 37 million tons, as compared with nearly 55 million tons in 1948. In the reverse direction, 80 million tons of ore are expected to pass through Lake Superior docks to Chicago and Lake Erie ports, against 69 million tons shipped last year and 83 million tons in 1948.

An Ore & Coal Exchange acts as a joint agency for railways and shippers in regulating the flow of these streams of traffic. The conditions are ideal for working long trains, composed of wagons carrying up to 70 tons, from the mines to the receiving yards at the ports. The wagons are dumped quickly at the coaling machines, but the average coal wagon is detained for five days at the Lake shipping places.

The U.S.A. export of coal overseas is insignificant compared with the Lakes traffic and coastwise shipments. During the eight months July, 1948, to February, 1949, foreign exports totalled 11,500,000 tons, but declined to 2,200,000 tons in the corresponding period of 1949-50. In the near future the movement abroad is not expected to exceed 200,000 tons a month. Any one British coal port from Methil to Cardiff could ship that tonnage with ease. The use of large wagons has not assisted the American coal industry to retain the foreign markets which it secured temporarily through the effects of the war on European coal production.

Great Britain needed the whole output of coal for home consumption until the end of 1947. In 1948, our ports shipped as export cargo and foreign bunkers more than 16 million tons, and in 1949 just over 19 million tons. These are small quantities to set against the capacity of the coaling appliances at the docks, which dealt with 104 million tons in 1923 and never handled less than 50 million tons in any normal pre-war year. Between the wars many appliances were adapted to take 20-ton wagons, and existing transport facilities are more than adequate. The trouble is that the National Coal Board could sell more coal overseas, but is not in a position to produce it.

### Less-than-Wagon-Load Traffic

There is a sad story to tell about the U.S.A. railways loss of less-than-wagon-load traffic. This means merchandise handed to the railways for conveyance in small lots. In 1929, the number of wagons carrying "smalls" was 13,206,000, or 25 per cent. of the total loadings. The number of such wagons then fell steeply until only 4,588,500 were forwarded in 1949, representing 12 per cent. of that year's loadings. This decrease of 65 per cent. in high-class traffic over a period of 20 years is due mainly to the faster service given by road and air carriers. Rail transits are often slow, partly because there is a natural reluctance to despatch large wagons with light loads.

Before the war, the average load of "smalls" was 5 tons, or one-eighth of the average wagon's tonnage capacity, though about one-fourth of its cubic capacity was occupied, as many packages contained light and bulky goods. During the war, in order to improve wagon user, steps were taken to increase the average load to 10 tons. That could be done in wartime, when road transport was restricted stringently, but in recent years the average load of "smalls" at starting point has fallen to little more than 3 tons.

The reversion to light loading is not holding the traffic to rail. Forwardings shrank by 10 per cent. in 1948 and again by 16 per cent. in 1949. During the first twelve weeks of 1950 there was a further decrease of 14 per cent. below the corresponding period of the pre-

vious year while total loadings, which until March 6 were affected adversely by the coal miners' strike, declined by only 10 per cent.

These facts demonstrate that the American system of freight working deals effectively with large blocks of traffic, but is not suited for handling small lots like the consignments which constitute a large proportion of the 54 million tons of merchandise forwarded annually by British Railways in some 14·5 million wagons. Most of these wagons have a capacity of 12 tons, but their average load is less than 4 tons, so that many of them must be loaded short of both tonnage and cubic capacity.

### Average Wagon Turn-Round Time

The Association of American Railroads publishes monthly the average turn-round time for the different types of wagon calculated from the serviceable wagon-days per wagon loaded. On December 20, for example, it was announced that the November average for box wagons was 15 days, and for all types of wagon 17 days, compared with 14 in November, 1948, and 13 in November, 1947, when wagons were scarce. Even when allowance is made for long hauls, the user seems poor for a go-ahead country. That is no doubt one reason why road and air carriers are nibbling away the railway share of the total commercial freight movement, measured in ton-miles. Before the war, the railways share was 63 per cent. The proportion grew under war conditions and in 1947 was 67 per cent., only to fall to 64 per cent. in 1948 and to 61 per cent. in 1949.

The portents are that the railways will fare worse in 1950, as 400,000 road vehicles compete actively with them. The average American freight train runs at a speed of 16 m.p.h.—twice as fast as the British Railways move—but days are lost in marshalling yards, where shunting locomotives work a third more hours than train locomotives register, including the hours spent on train shunting at wayside stations. It is significant that the more enterprising U.S.A. systems are mechanising a considerable number of yards, to speed up the movement of wagons, as well as revising their freight working timetables.

In the competitive transport situation, which exists everywhere today, what matters most is the time factor. Express freight services, scheduled like passenger trains, offer the surest means of securing to rail the high-class merchandise which rival carriers covet. The fitting of wagons to run in braked trains was extended gradually in this country before the war, and British Railways have nearly 130,000 such vehicles. Their success as freight carriers will depend largely on the competent use of this fitted stock for urgent consignments and on improved mobility for general goods traffic.

The adoption of the 20-ton wagon as standard for minerals and coal should not be delayed long, but there is no pressing need to add to the present stock of goods wagons, plated to carry from 20 to 50 tons, which are necessarily confined to workings offering full loads.

## Scottish Region Staff Negotiating Machinery

ON April 19 Scottish Region sectional council No. 2 (Locomotive footplate and depot) met in Glasgow, a meeting which marked a major development in Scotland in the machinery of negotiation for railway staffs, under which there is provision for consultation on the widest scale between the management and the staff.

The meeting was an inaugural one, under the chairmanship of Mr. R. F. Harvey, Motive Power Superintendent, Scottish Region. Mr. T. F. Cameron, Chief Regional Officer, Scottish Region, who paid a visit to this first "All Scottish" sectional council meeting, after welcoming the representatives present, referred to the developments which had taken place in Scotland.

Until now the interests of Scottish railwaymen have been the responsibility of councils formed in, and representative of, the territories covered by the East Coast route from Aberdeen to London, and from Wick to London by the West Coast and Midland routes.

Five sectional councils have been set up in the Scottish Region to which staff coming, broadly, within the following categories send elected representatives:—(1) Supervisory and clerical; (2) locomotive footplate and depot; (3) passengers and freight train operating; (4) freight handling and cartage; (5) permanent way and signalling maintenance. The meeting held in Glasgow on April 19 was the first of a series of sectional council meetings which will embrace all five of these councils.

*Inaugural meeting of Scottish Region sectional council No. 2 at Glasgow on April 19*

*Left to right (round the table):* Messrs. W. K. Hamilton, Assistant (Utilisation) to Motive Power Superintendent; A. H. Mackay, Secretary, Council Management Side; C. H. Brazier, Regional Staff Officer; T. F. Cameron, Chief Regional Officer; R. F. Harvey, Motive Power Superintendent (Chairman); E. D. Trask, Assistant Motive Power Superintendent; J. D. Barbour, Staff Assistant to Motive Power Superintendent; J. M. Fyfe, Assistant (Maintenance) to Motive Power Superintendent; J. Robertson; J. Duncan; O. Morton; H. Styler; G. B. Crombie, Secretary to Council, Staff Side; A. Bunting, Chairman, Staff Side; W. Paterson; D. Forret; A. Leith; G. J. Stewart

# Engineering Works Outside the Gare de Lyon, Paris

*Fouling movements are minimised by the reconstruction of a flyover carrying depot lines*

*General view of approach to the Gare de Lyon before alterations, with two depot tracks crossing up lines, and down lines on extreme right*

THE electrification of the Paris-Lyons line of the French National Railways will enable a much increased service, especially suburban, to be worked. One important obstacle that had to be overcome before the Gare de Lyon, in Paris, could be expected to handle the extra traffic was the layout of the approach tracks.

The six tracks outside the station were arranged in the following order (from left to right, seen from the station):—down main, down local, down depot, up depot, up local, up main. By this layout all empty stock movements between the depot and the main line arrival and departure platforms had to cross either the up or the down suburban line at the platform approaches. To eliminate these fouling movements, two measures were decided on: (*a*) A new down depot track was constructed on the extreme right next to the up main line, so that empty stock can now be moved from the main line arrival platforms to the depot without crossing the up local line; (*b*) the down tracks were rearranged so that the two existing depot tracks now lie between the down main and down local lines and empty stock can be worked to the departure platforms without crossing the down local line. The final arrangement is therefore: down main, two depot tracks, down local, up local, up main, one depot track. The three depot tracks can be used in either direction.

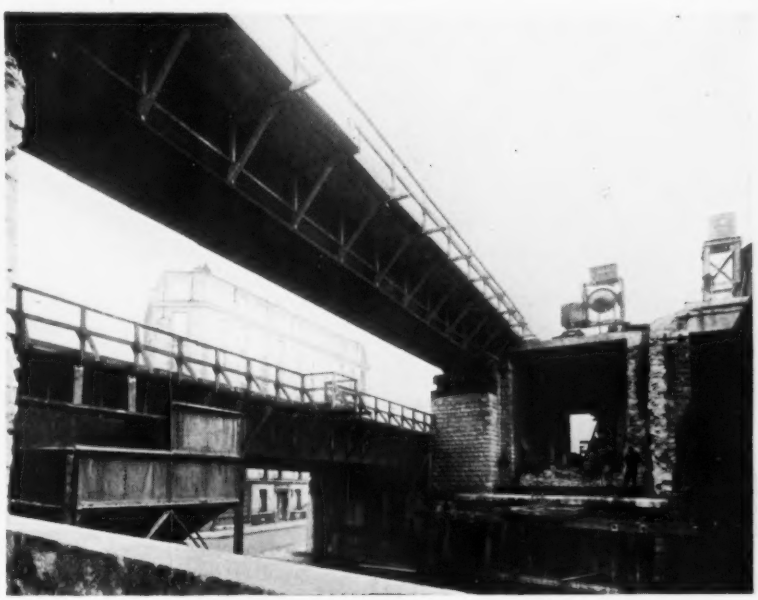
The construction of the additional depot track caused no difficulties, but the rearrangement of the existing depot tracks and the down local line involved complicated engineering works, described by Messrs. J. Sandoz, Departmental Chief Engineer of the South-Eastern Region, and P. Brasseur, of the French National Railways, in the December, 1949, issue of *Travaux*, to which we are indebted for the illustrations reproduced.

The two depot tracks cross the two up lines on a flyover a short distance outside the station just beyond the point where all the six tracks cross the Rue Proudhon. The new layout requires that the flyover of the two depot tracks must cross not only the two up lines but also the down local line, and this additional flyover had to be moved so close to the road underbridge that there are at this point three different levels:—street, running lines and the depot tracks on the flyover. The skew bridge carrying the depot tracks over the down local is almost above the street.

The structure therefore consists of three distinct parts:—(1) A tubular bridge of reinforced concrete, carrying the down local line across the Rue Proudhon; (2) an immediately adjacent skew bridge of reinforced concrete carrying the depot tracks over the street and partly over the down local line; and (3) a skew deck bridge completing the crossing of the depot tracks over the down local line and linking up with the existing flyover over the up lines.

The tubular concrete bridge which encloses the down suburban line has an overall length of 85 ft. 4 in. (81 ft. 4 in. between the supports) and has a rectangular cross-section of 15 ft. 3 in. wide and 17 ft. 11 in. high. The bridge is so close to the skew bridge that the far end of its upper deck has to support one of the depot tracks.

The high-level skew bridge of the depot tracks across the street is irregular in shape. It is carried by two non-parallel reinforced concrete girders



*Rebuilding of structures crossing the Rue Proudhon. On left, spans carrying down fast line; in centre, temporary girder carrying one depot line, with tubular concrete structure for new down suburban line being constructed; existing up lines crossing on girder bridge on extreme right*

*Looking towards the Gare de Lyon before track alterations, showing (left) depot tracks on flyover crossing up fast and local lines in centre, with down fast and local lines on right*

which also vary in height to facilitate drainage.

The deck bridge is virtually an extension of the tubular bridge.

The work had to be carried out in carefully planned stages, as none of the lines concerned, except one of the depot tracks, could be interrupted for any length of time. As a preliminary, the double-track bridge structure carrying the down main and down local line over the Rue Proudhon was replaced by two single-track structures, a permanent one for the down main line and a temporary one for the down local line which was to be moved.

During the following stages, each of the two depot tracks was removed in turn, so as to carry out, in the space thus gained, all demolition and reconstruction that could be effected without interference with the running lines. Finally, the down local was moved to its final alignment, and the second depot track on the flyover restored. The works took from May, 1947, to September, 1948.

*View after completion of works, with up tracks occupying the same relative positions in the foreground, but depot tracks flyover crossing also the former down main, now down local, line ; former down local becomes down main*

# Engineering Works Outside the Gare de Lyon, Paris

*View looking south, before alterations, showing from left to right, down slow, down main, depot lines crossing, up slow and up main*

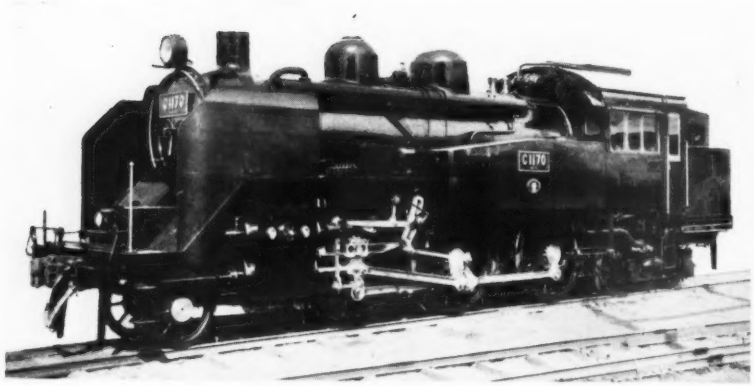
*Third phase of works, showing new retaining wall for flyover being constructed; down slow line moved adjacent to up lines on right*

*View looking south after alterations, showing from left to right, siding, down main, depot tracks, down slow (passing under flyover in new tubular structure in centre), up main and up slow lines*

# Impressions of the Japanese Railways

*The effects of war on locomotive running and train operation*

*By Colonel Howard G. Hill*



*Class "C 11" 2-6-4 for secondary and branch line services*

COMMODORE PERRY presented a miniature steam locomotive and short length of track to the ruling Shogun on the occasion of a visit of the United States fleet to Japan in the middle of the last century, which aroused keen interest in railways among the Japanese. The first railway, from Yokohama to Shimbashi, near Tokyo, 15 miles, was opened in 1872. Railway construction was pushed ahead vigorously, and the present system of the Japanese Government Railways, amounting to some 11,000 route miles of 3 ft. 6 in. gauge, covers the four principal islands of Hokkaido, Honshu, Kyushu, and Shikoku. It consists of nine operating divisions with 13,850 miles of single and multiple main track and 6,400 miles of sidings, and is the result of much amalgamation. There were recently some 4,700 miles of privately-owned lines, of gauges varying from 2 ft. to 4 ft. 8½ in.

### Physical Features

The main lines were built along narrow coast plains, with cross-country connecting lines winding through valleys and mountain passes of great beauty. The track structure on mountain sections is good. Many drainage ditches are masonry-lined against erosion. There are 36,000 bridges and 2,200 tunnels, the latter totalling 426 miles; the longest tunnel is six miles and the longest bridge 4,000 ft. long.

Gradients on mountain sections range from 1 in 40 to 1 in 30; a few stretches of 1 in 15 are worked by rack and pinion. Rails on main-line sections weigh from 81 lb. to 110 lb. per yd., on neatly-dressed rock ballast. On secondary lines, 53-lb. to 81-lb. rails are used, on gravel or rock ballast. Timber sleepers are used throughout the system. There was recently much badly-worn rail in the Tokyo-Yokohama and other areas with a high traffic density, but track conditions generally are good.

Left-hand running is in force. Signalling on double-track lines is by automatic electric three-aspect colour-light signals. On single-track lines the staff system is used, with manually-controlled two-position semaphore signals to govern entrance to, and exit from, running loops.

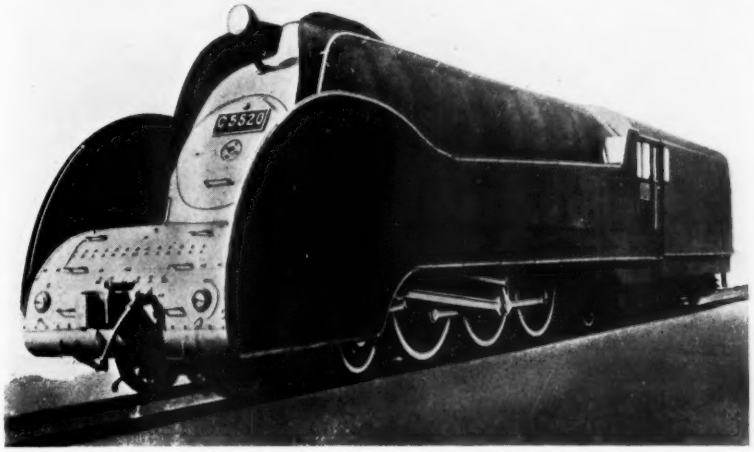
Guards of trains seem to have practically nothing to do with operating the train, entire responsibility for which rests with the driver; this responsibility is not shared by the fireman, whose sole duty is to fire the locomotive and attend to the injectors. The average age of drivers is, or recently was, 20, and of firemen, 18 years, due to the drafting of older men into the army, and to their transfer to railways in Korea, Manchuria, and China during Japanese occupation of those countries, which made it necessary to start a large number of boys of 16 as cleaners, from which grade they were rapidly promoted to fireman after brief training. Despite this, they seem very conscientious and surprisingly efficient, though they clearly know little about the fine arts of firing and driving, and work by rule rather than by judgment based on training and experience. The standards of workmanship in running sheds and shops, therefore, are low; many girls are employed on jobs such as repair of machine tools and air-brake equipment, preparation of small moulds in foun-

*Class "C 58" freight locomotive, built in 1938*

*Class "EF 55" streamline 4-6-6-2 electric locomotive for main line services between Tokyo and Numazu*

des, and also on various kinds of station work, and in electric suburban trains.

Strict military discipline prevails among all railway employees, the result probably of German influence. When an official and a subordinate meet, both salute, remove their caps, and bow low, and the ceremony is repeated on parting. All senior officials and many subordinates wear uniform. When a train enters a station, the stationmaster and staff line up and salute as the locomotive passes, the salute being returned by the enginemen. This discipline seems to result in implicit obedience to orders among all ranks.




*Streamline 4-6-2 type locomotive of Class "C 55" for main-line passenger working*

### New Steam Locomotives

Three new classes of steam locomotive recently have been turned out, two of the 4-6-4 type, both being conversions, using the boiler, cylinders, and other parts, from 2-8-2 types. The third class is a 2-10-4 type tank engine designed to run bunker first, for service on heavily-graded lines. The 6,000-odd steam locomotives include some 500 2-8-0 and 1,800 2-8-2 type for freight, and 1,000 4-6-2 type for passenger service. In addition there are many smaller locomotives of various wheel arrangements, many from 40 to 60 years old, and of obsolete designs. The latest groups of 2-6-2, 4-6-2, and 2-8-2 types, built during the war, include many copied from American railways.

Electric locomotives are mainly of the 1-C-C-1 and 2-C-C-2 types, used in both passenger and freight service. There are 300 route-miles of electrified line, including the two under-sea tunnels connecting Shimonoseki (Honshu) and Moji (Kyushu) opened during the war. Most electric locomotives were built in Japan. Current is collected from an overhead wire at 1,500 V. d.c. Power is supplied by hydro-electric as well as by steam plants; during droughts it is often necessary to curtail electric train services through reduced production of current by hydro-electric plants, and reduced coal production also occasionally curtails power supply by steam generators.

Coal used in steam locomotives is of a poor quality, running about 8,000 B.T.U. per lb., and consists of about 70 to 90 per cent. fines which will pass through a ½-in. square screen. About half this fine coal goes up the chimney unburned. Firing is by hand with a short-handled scoop, handled with one hand only. Grate areas are too small for economical rates of combustion. On two occasions firemen were seen using a full-size shovel, with which a much thinner, cleaner, and hotter fire was maintained than with the small scoop; with the latter a much deeper fire bed must be built, which they keep rather heavily blanketed with green coal. Firemen object to the large shovel because they lack the physical stamina to wield it. The result of this is that boiler efficiency is 40 to 45 per cent., and reduced power output of locomotives reduces train tonnages and speeds and causes much waste of fuel.

Japanese railwaymen take great pride in punctuality, which is easy to achieve, because schedules are ample. The highest average start-to-stop speed recently was 25 m.p.h., and running speeds seldom exceed 50 m.p.h. Acceleration from stop is slow, to minimise strain on the engine and to conserve coal; for the same reason little effort is made to regain lost time.

### American Coach Design Followed

All rolling stock is equipped with automatic couplers and Westinghouse automatic air brakes, much of the latter manufactured in Japan. The 11,000 passenger coaches follow American design closely. They are eight-wheel vehicles of composite wood and steel construction, 65 ft. long, with electric lighting and steam heating. Trains of from 10 to 14 coaches run on the main lines, and all passenger trains tend to be overloaded.

Most of the 119,000 goods vehicles are four-wheel. Goods trains consist normally of 35 vehicles and speeds are low. Some trains include brake vans, usually placed five or six wagons ahead of the rear end, apparently in case of a rear-end collision. Well-designed marshalling yards at strategic points are well maintained, some of them with humps and electric interlocking systems.

Bomb-damage to railway installations was purposely avoided by the Allies, because the railways would have been of importance to the land forces in an invasion of Japan, which lacks an extensive modern system of roads. Except in a few minor instances, there was no great damage to track, yards, bridges, or tunnels. Incendiary bombs damaged Tokyo Central Station and a few locomotive depots and workshops. The atom bomb damaged the station building at Hiroshima, but as it was on the fringe of the area affected by blast, it escaped serious damage. At Nagasaki, much damage to railway installations was caused by the atom bomb.

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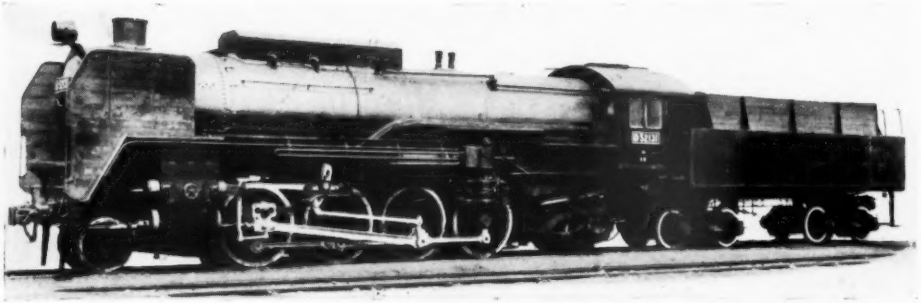
HISTORICAL MODEL RAILWAY SOCIETY.—At a meeting of model railway enthusiasts held recently at Chessington Zoo, it was decided to form a body to be known as the Historical Model Railway Society. The new society is for those actively interested in the construction, operation and preservation of models of the railways of Britain, and their equipment, up to the dates they lost their separate identities, either at grouping or at nationalisation. A constitution has been drawn up provisionally by the Committee appointed for the purpose and is to be ratified at a meeting to be held at 3 p.m. on Saturday, June 3, in the Board Room of Chessington Zoo Limited. All those interested in joining the society are invited to the meeting, and the organisers ask those wishing to attend to advise Mr. R. G. Dettmar, of 21, Craddocks Avenue, Ashtead, Surrey, as soon as possible.

RAIL AND STEAMER TRIPS.—Combined rail and steamer tickets from London and suburban stations to Hampton Court and Windsor are being issued every day until September 30, by the Southern Region of British Railways. The inclusive fare of 8s. 6d. return includes rail journey from Waterloo to Windsor and return by any train the same day, and a four-hr. cruise by Salter Bros. Ltd. steamer to Cookham and back. An alternative excursion at 9s. 4d. inclusive is by train to Hampton Court, thence by Salter Bros. Ltd. steamer to Windsor, returning by any train the same day. Fares from suburban stations are proportionate to the London rates.

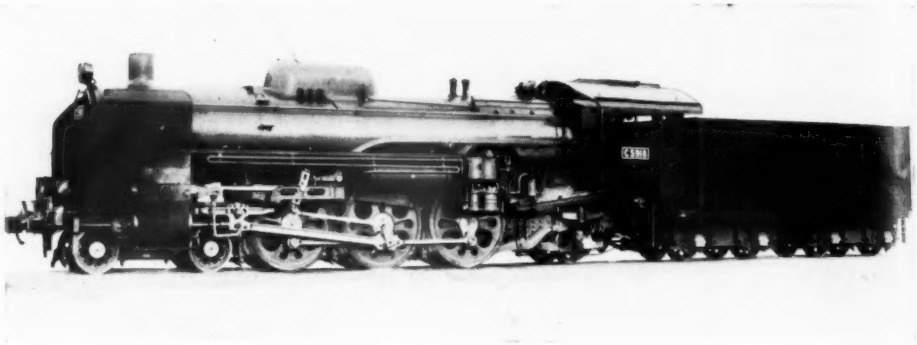
STEEL FOR LAND BOILERS AND OTHER PRESSURE VESSELS.—The British Standards Institution has published B.S.1633: 1950, Steel for Land Boilers, Receivers and Other Pressure Vessels. The standard covers the requirements for steel plates, sections, bars and rivet bars for service temperatures not exceeding 900 deg. F., and includes special requirements for steels for use above 700 deg. F. Copies may be obtained from the British Standards Institution, Sales Department, 24, Victoria Street, London, S.W.1, price 2s., post free.

# Impressions of the Japanese Railways

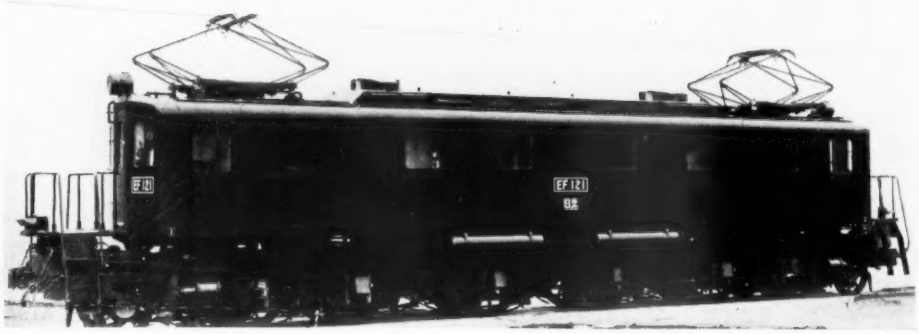
(*See article on page* 600)



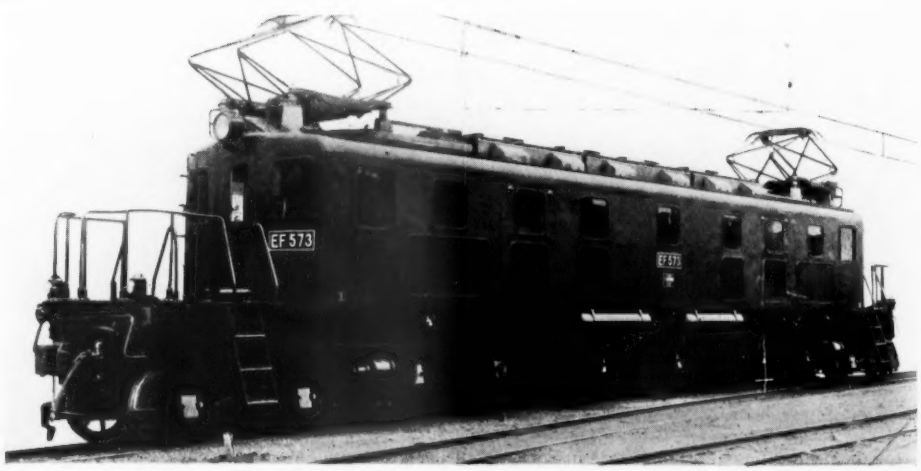
*Latest type of freight locomotive, Class "D 52" 2-8-2 built in 1944. Some were converted to 4-6-4 passenger locomotives in 1948 and as such rank as the largest passenger type*



*Main-line 4-6-2 of Class "C 59," built 1943-44*



*Main-line freight electric locomotive of 2-6-6-2 type, Class "EF 12"*



*Class "EF 57" 4-6-6-4 electric locomotive, used on main line passenger trains between Tokyo and Numazu*

# RAILWAY NEWS SECTION

## PERSONAL

The Minister of Transport has acceded with regret to the request of Lord Inman that he should be relieved at the end of this month of full-time duties as Chairman of the Hotels Executive. Lord Inman has agreed to continue for a time as part-time Chairman, but, at his own request, will not receive the salary of £2,000 a year which attaches to this office. Lord Inman desires, now that the Hotels Executive has been established, to devote more time to other activities, including his work in connection with Charing Cross Hospital, with which his name is so closely connected and of which for a long time he has been Chairman.

Mr. A. T. Wilford, B.Sc., A.R.C.S., F.R.I.C., C.I.Mech.E., F. Inst.Pet., has been appointed Director of Research, London Transport Executive.

We regret to record the death on May 17, at the age of 85, of Mr. Charles Dempster Collins, who was Architectural Assistant to the Chief Engineer, L.B.S.C.R., from 1897 to 1924.

Mr. W. A. Hewitt, who, as recorded in our April 28 issue, has been appointed General Manager, North Western Railway, Pakistan, was born in May, 1900, and was educated at St. Peter's College, Radley, where he gained an exhibition. In 1917 he joined the L.N.W.R. as a probationer and served in H.M. Forces from 1918 to 1919. After resuming his duties with the L.N.W.R. Mr. Hewitt gained experience in various branches of the Operating and Commercial Departments; he also attended a number of courses on different subjects connected with railways, at the London School of Economics and at Victoria University, Manchester. In 1924, he joined the Bengal & North Western Railway, India, as Assistant Traffic Superintendent and was promoted District Traffic Superintendent in 1937. Mr. Hewitt officiated as Deputy Traffic Manager from 1947 and also as Traffic Manager for a short time in the same year. At the time of partition he opted for Pakistan and was transferred to the North Western Railway. Shortly after joining the North Western Railway, Mr. Hewitt was appointed Divisional Superintendent, Multan, in 1947, and in June, 1948, he became Chief Operating Superintendent.

We regret to record the death on May 17 of Mr. Edward Terence MacDermot, J.P., M.A., author of the "History of the Great Western Railway." Mr. MacDermot was born in 1873 and educated at Downside School and Magdalen College, Oxford; subsequently, he was called to the bar, but did not practise. He devoted his studies to historical matters, principally in connection with Somerset and was not a railway historian in the general sense, as his interest was confined to the Great Western Railway as it existed before Grouping in 1923. That company placed its records freely at his disposal and he produced the noteworthy "History of the Great Western Railway," of which Volume 1 was published in 1927 in two parts and Volume 2 in 1931 in one part. These took the story up to 1921, and they constitute a reference work, comparable in detail only with Tomlinson's "North Eastern Railway." Publication was undertaken by the Great Western Railway Company largely through the personal interest of Lord Churchill, the Chairman, though the work was in no sense an "official history."

Mr. T. B. Hare, Principal of the All-Line Operating School, Darlington, since 1943 and in recent months also Acting Principal of the Commercial School, Darlington, retired on May 20.

Mr. George Caster, B.Sc. (Eng.), A.M.I.C.E., A.M.I.Mech.E., Mechanical Engineer, Gorton, Eastern Region, British Railways, who, as recorded in our May 12 issue, retired on April 29, joined the former Great Eastern Railway as a premium apprentice at Stratford Works in 1903 under Mr. James Holden. He was appointed Technical Assistant to the Works Manager in 1910 and remained in that capacity until called for military service in the Honourable Artillery Company in 1914. Mr. Caster subsequently took a commission as a technical officer in the Army Ordnance Department and rose to the rank of Major. He returned to Stratford in 1919, and was subsequently appointed Assistant Locomotive, Carriage & Wagon Works Manager in 1921; he went to Gateshead as Locomotive Works Manager in 1930 and took up the post of Carriage and Wagon Works Manager, Gorton, in 1941. Two years later Mr. Caster became Locomotive Works Manager, Gorton, and Mechanical Engineer, Gorton, in January, 1947.

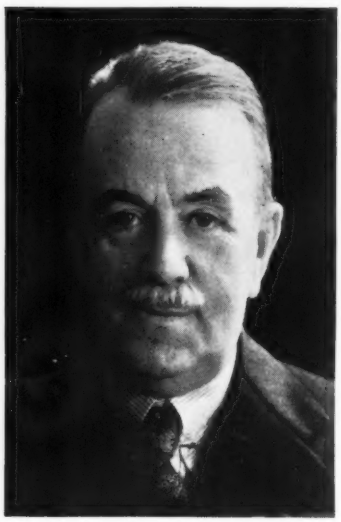
Mr. A. B. Demmer, A.M.I.Loco.E., Divisional Transportation Superintendent, Ceylon Government Railway, who, as recorded in our April 28 issue, has been appointed Operating Superintendent, was born in 1898 and educated at Trinity College, Kandy; he joined the Ceylon Railway in 1913 as a first grade apprentice. After completion of his apprenticeship he served in various sections of the Locomotive Department, and after a special course of training was appointed Probationary Assistant Divisional Transportation Superintendent in 1929. Mr. Demmer later proceeded to the United Kingdom for further training and was attached to the G.W.R. for two years. He was appointed Assistant Divisional Transportation Superintendent in 1933 and Divisional Transportation Superintendent in 1940. From March, 1948, until March, 1949, Mr. Demmer acted as Commercial Superintendent; thereafter he was appointed Acting Operating Superintendent.

*Mr. W. A. Hewitt*

Appointed General Manager, North Western Railway, Pakistan

Mr. H. R. Gunawardhana, B.A., B.Sc. (Econ.), A.M.Inst.T., Divisional Transportation Superintendent, Ceylon Government Railway, who, as recorded in our April 28 issue, has been appointed Commercial Superintendent, received his education at Ananda College, Colombo, and entered the service of the Ceylon Railway as a probationary assistant accountant in 1935. Two years later he secured a transfer to the Traffic Department as a Probationary Assistant Divisional Transportation Superintendent, and after a course of training, he left for the United Kingdom and received further training with the L.N.E.R. He was appointed Assistant Divisional Transportation Superintendent in 1940 and Divisional Transportation Superintendent in 1945. Mr. Gunawardhana is a B.A. and B.Sc. (Economics) of London University, and holds the Diploma in Public Administration of the same University.

Mr. G. P. Barnett, Recruitment, Training & Education Officer, London Transport, who, as recorded in our May 5 issue, has retired, began his career in 1900 as a junior clerk with the London Road Car Company. In 1908, when the London Road Car Company was absorbed by the London General Omnibus Company, Mr. Barnett was appointed second-in-charge of



*Mr. George Caster*

Mechanical Engineer, Gorton, Eastern Region, British Railways, 1947-50

*Mr. A. B. Demmer*

Appointed Operating Superintendent, Ceylon Government Railway

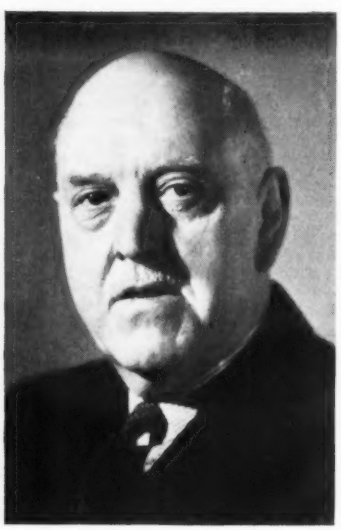
*Mr. H. R. Gunawardhana*

Appointed Commercial Superintendent, Ceylon Government Railway

the newly-formed Traffic & Wages Audit Office and, four years later, became Traffic Auditor. Between 1916 and 1933 he was successively Assistant to the Operating Manager, Road Superintendent and Assistant Traffic Superintendent. On the formation of the London Passenger Transport Board in 1933, he was appointed Staff Superintendent, first for the Central Buses and later for all road services. In 1944 he was made responsible for all staff training as Superintendent of Recruitment & Training and last year became Recruitment, Training & Education Officer. During the war, Mr. Barnett carried out the task of recruiting and training staff, mostly women, to replace the large number who had joined the Forces. At the same time the undertaking was called on to assist in the training of large numbers of service men and women in driving and vehicle maintenance. Mr. Barnett has always taken a keen interest in staff welfare and is a Vice-President and Trustee of the London Transport (Central Road Services) Employees' Friendly Society.

Mr. M. Cranfield, B.A., who, as recorded in our March 17 issue, has been appointed Assistant Traffic Superintendent, Tanga, East African Railways & Harbours, was educated at Berkhamsted School and Hertford College, Oxford. He joined the L.N.E.R. as a traffic apprentice in 1937 and served at various stations before being posted to district and headquarter offices for further training. During the war, Mr. Cranfield served with the infantry in the Middle and Far East and was demobilised with the rank of Major in 1946. On his return to civil life Mr. Cranfield rejoined the L.N.E.R. and, after attending senior operating and commercial schools at Darlington, was appointed Assistant Goods Agent at Leeds, Wellington Street.

Mr. E. A. G. Harrop, who, as recorded in our March 17 issue, has been appointed Assistant Traffic Superintendent, Headquarters, Nairobi, East African Railways & Harbours, was educated at St. Peter's School, York, and joined the L.N.E.R., North Eastern Area, in 1933. After service at various stations at district and headquarter offices, he was selected for special training in 1939. During the war he served with the Royal Engineers, chiefly in the Middle East, and was demobilised with the rank of Captain in 1946. Mr. Harrop then took up an appointment with the Railways Branch, Transport Division, Germany, where he served at various Regional Headquarters and was later concerned with rail and inter-zonal movements in the Berlin area. At the time of his appointment to the East African Railways & Harbours, he was stationed at Reichsbahn Headquarters, Wuppertal, as Railways Branch representative.



*Mr. G. P. Barnett*

Recruitment, Training & Education Officer, London Transport, 1949-50

*Mr. M. Cranfield*

Appointed Assistant Traffic Superintendent, East African Railways & Harbours

*Mr. E. A. G. Harrop*

Appointed Assistant Traffic Superintendent, East African Railways & Harbours

# British Transport Commission Statistics (Period No. 3)

*Summary of the principal statistics for the four-week period ending March 26*

## STAFF

| — | B.T.C. Head Office | British Railways | London Transport | British Road Services (Road Haulage) | Road Passenger (Provincial & Scottish) | Hotels & Catering | Ships & Marine | Inland Waterways | Docks, Harbours, Wharves | Railway Clearing House | Common Services : Commercial Advertisement | Legal | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Number ... ... | 231 | 620,403 | 98,998 | 70,298 | 57,255 | 17,355 | 6,000 | 5,155 | 19,809 | 647 | 160 | 266 | 896,577 |
| Inc. or dec. ... | — 1 | — 893 | — 92 | + 420 | Nil | + 40 | + 136 | + 12 | — 47 | — 2 | + 2 | — 4 | — 429 |

## BRITISH TRANSPORT COMMISSION TRAFFIC RECEIPTS

| — | Four weeks (Period No. 3) To March 26, 1950 | Four weeks (Period No. 3) To March 26, 1949 | Aggregate for 12 weeks 1950 | Aggregate for 12 weeks 1949 |
|---|---|---|---|---|
| | £000 | £000 | £000 | £000 |
| *British Railways*— | | | | |
| Passengers ... ... ... | 6,690 | 6,877 | 18,917 | 19,836 |
| Parcels, etc., by passenger train | 2,191 | 2,131 | 6,345 | 6,189 |
| Merchandise ... ... ... | 6,534 | 6,614 | 18,931 | 19,406 |
| Minerals ... ... ... ... | 2,426 | 2,396 | 7,111 | 7,120 |
| Coal & coke ... ... ... | 5,679 | 5,512 | 16,721 | 16,276 |
| Livestock ... ... ... ... | 98 | 91 | 257 | 285 |
| | 23,618 | 23,621 | 68,282 | 69,112 |
| *British Railways*— | | | | |
| Delivery & other road services... | 705 | 661 | 1,991 | 1,963 |
| *Ships & Vessels* ... ... ... | 508 | 492 | 1,504 | 1,487 |
| *London Transport*— | | | | |
| Railways ... ... ... ... | 1,114 | 1,121 | 3,322 | 3,346 |
| Buses & coaches ... ... ... | 2,349 | 2,296 | 6,837 | 6,814 |
| Trams & trolleybuses ... ... | 823 | 819 | 2,424 | 2,443 |
| | 4,286 | 4,236 | 12,583 | 12,603 |
| *British Road Services*— | | | | |
| Freight charges, etc. ... ... | 4,514 | 1,486 | 13,084 | 4,182 |
| *Road Passenger Transport* ... ... | 2,392 | 2,258 | 6,952 | 6,756 |
| *Docks, Harbours & Wharves* ... | 835 | 801 | 2,510 | 2,365 |
| *Inland Waterways* ... ... ... | 118 | 120 | 350 | 361 |
| *Hotels & Catering* ... ... ... | 1,016 | 943 | 2,993 | 2,791 |

## LONDON TRANSPORT

| — | Passenger journeys | Inc. or dec. per cent. over 1949 | Car miles | Inc. or dec. per cent. over 1949 |
|---|---|---|---|---|
| | 000 | | 000 | |
| Railways... ... ... ... | 50,331 | — 0·4 | 18,028 | — 0·3 |
| Buses & coaches ... ... | 212,260 | + 3·2 | 23,905 | — 1·4 |
| Trams & trolleybuses ... ... | 90,471 | + 1·1 | 8,560 | — 1·3 |
| Total ... ... ... | 353,062 | + 2·1 | 50,493 | — 1·0 |

## INLAND WATERWAYS

**Tonnage of traffic and ton-miles**

| — | Tonnage per cent. | Inc. or dec. per cent. over 1949 | Ton miles | Inc. or dec. per cent. over 1949 |
|---|---|---|---|---|
| | 000 | | 000 | |
| Coal, coke, patent fuel & peat | 493 | +10·4 | 7,181 | +14·6 |
| Liquids in bulk ... ... | 147 | — 1·9 | 3,411 | + 2·7 |
| General merchandise ... ... | 357 | +22·7 | 5,413 | — 0·8 |
| Total ... ... ... | 997 | +12·3 | 16,005 | + 6·4 |

## BRITISH RAILWAYS

**Rolling Stock Position**

| — | Operating stock | Number under repair | Available operating stock | Serviceable stock in 1949 |
|---|---|---|---|---|
| Locomotives ... ... ... | 19,217 | 3,404 | 15,813 | 15,927 |
| Coaching vehicles ... ... | 56,752 | 5,192 | 51,560 | 49,930 |
| Freight wagons... ... ... | 1,105,419 | 84,407 | 1,021,012 | 1,066,571 |

## BRITISH RAILWAYS

**Passenger Journeys (Month of February, 1950)**

| Full fares | Monthly returns | Excursions, cheap day, etc. | Other descriptions | Workmen | Season tickets | Total | Inc. or dec. per cent. over 1949 |
|---|---|---|---|---|---|---|---|
| 3,404,000 | 11,677,000 | 11,634,000 | 3,197,000 | 18,057,000 | 17,530,000 | 65,499,000 | + 1·3 |

## BRITISH RAILWAYS

**Freight Tonnage Originating and Estimated Ton-Miles (Period No. 3)**

| — | Minerals | Merchandise | Coal & coke | Livestock | Total | Inc. or dec. per cent. over 1949 |
|---|---|---|---|---|---|---|
| | 000 | 000 | 000 | 000 | 000 | |
| Tons originating ... | 4,837 | 4,345 | 13,579 | 60 | 22,821 | + 2·3 |
| Ton-miles ... ... | 406,346 | 587,200* | 822,063 | — | 1,815,609 | + 1·7 |

* Includes livestock

## BRITISH RAILWAYS (Period No. 3)

| — | Total steam coaching train-miles | Total electric coaching train-miles | Total freight train-miles | Freight train-miles per train engine-hour | Net ton-miles per total engine-hour | Locomotive coal consumption: Total tons | Locomotive coal consumption: Lb. per engine-mile |
|---|---|---|---|---|---|---|---|
| | 14,125,000 | 3,713,000 | 11,331,000 | 8·26 | 585 | 1,095 ,000 | 64·5 |
| Inc. or dec. per cent. over 1949 ... ... ... | + 0·4 | + 3·7 | + 1·2 | + 1·6 | + 3·5 | — 3·5 | — 2·9 |

# London Area Passenger Charges Scheme

*Increased cost of London area services: policy of workmen's fares: and adjustment of Southend line fares*

Mr. R. H. Wilson, Comptroller, British Transport Commission, in continuing his evidence when the Transport Tribunal resumed its inquiry on May 17, asked by Mr. R. Moelwyn Hughes, K.C., whether London Transport was paying its way, said he thought not. Net traffic receipts in 1949 on the services run by the London Transport Executive were £3·7 million, and that was a much smaller amount than the figure for 1948, when it was £5·9 million.

He did not agree that London was being asked to take an unfair share of the burden. The scheme was to put the finances of London Transport in balance.

Replying to Mr. N. R. Fox-Andrews, K.C., representing the National Union of Ratepayers' Associations, Mr. Wilson said that the cost of carrying the public on services in the London area was greater than the amount which the public now paid by £3½ million. In effect, they were paying less for transport than before the war, as compared with other commodities and in view of increased prices.

Replying to a question regarding the B.T.C. financial deficits, Mr. Wilson said that, provided the charges schemes went through and they kept control of costs and were properly efficient, they should be making a surplus in ten years.

Mr. Fox-Andrews then asked whether it was the policy of the B.T.C. that in the London area the public should lose the advantage of cheaper travel on forms of transport that were cheaper to operate than others.

Mr. Wilson: I cannot answer yes or no because the question is based on an assumption which I do not accept. Neither do I know whether the scheme if approved will be used as a precedent. These matters are under discussion the whole time.

Sir W. Bruce Thomas, President of the Transport Tribunal, said he failed to see how the question was going to help. They were concerned with the settlement of a scheme for the London area, which was of course a first step, as was shown in the Act.

Mr. Wilson indicated that if, after all the schemes had been produced, it looked as if the London scheme was unfair, it would be changed.

Mr. P. W. Showan, counsel for the North Watford Ratepayers' Association, asked whether it would be possible to make concessions of several per cent. in the proposed increases to alleviate the hardship to black-coated workers and others, without wrecking the scheme.

Mr. Wilson replied that there were no margins for giving away anything, pointing out that costs were estimated at £82·6 million, whereas revenue was expected to yield £80 million. Such an alteration in the scheme would mean they would be further in deficit.

### Freight Rebates Fund

When the inquiry entered the seventh day, on May 18, Mr. Wilson was cross-examined by Mr. E. A. Capewell, K.C., for the Middlesex County Council, as to the financial position of the B.T.C., and, asked if there was likely to be in increase in fares in the country road passenger services, Mr. Wilson said that would depend on the attitude of the licensing authorities in each area. Questioned about the payments or transfers to the Freight Rebates Fund he expressed the opinion that the Commission "might well be relieved of these payments."

The President: The origin of the rebate was a contribution from the railway out of the de-rating reliefs to assist depressed industries and I think the depression now has possibly shifted.

Mr. Wilson, replying to further questions, said that if there was a suggestion that London should contribute £4,000,000 towards reserve funds to "underpin" the B.T.C., and that nobody else was to be asked to make any contribution towards its financial stability, that was not the case.

Mr. Wilson was then asked by Mr. R. Reader Harris, M.P., counsel for the London Passengers' Association, why it was necessary in a levelling up of charges to have £3½ million out of the process.

Mr. Wilson: I would say approximately £3½ million. Revenue requirements from the London area next year are £82·6 million. Our duty is to balance our accounts. Naturally the Commission takes into account the problem of the cost of living. It is part of the whole problem of selling transport to the public. Some people, apparently, suggest that the public is being soaked, and that, therefore, we must leave our accounts unbalanced.

Asked whether London Transport had to be sold to the public, or whether Londoners had to use the transport because they could not do without it, Mr. Wilson said he knew of no organisation that had been quite so successful in selling the services which it had to provide. He hoped it could ultimately be explained to the public why it was necessary for them to pay a fair and reasonable figure for their transport.

Mr. Harris: How are you going to explain to a working-class person that it is necessary for him to pay 40 per cent. more if he travels from, say, Hounslow to London in the mornings?

Mr. Wilson: It has been explained here and we hope that ultimately the truth will seep out and down throughout the whole London area.

Turning to bus fares Mr. Harris asked why was it necessary to have a 1½d. fare in London whereas in the Provinces it was only 1d.

Mr. Wilson said it depended on the economics of transport, which varied greatly from area to area, and he hoped there was real understanding that it was a completely unfair comparison to say that the cost of the service provided by central buses of the London area was one point something or other, whereas someone else who was extremely efficient in other parts of the country was doing it for less than 1d.

When the inquiry resumed on May 19 the Chairman said they would now like to hear explanations on behalf of those objectors whom the Tribunal were not yet satisfied were entitled to take part.

Mr. G. R. Rougier, counsel for the Southend, Westcliff & District Chamber of Trade, submitted that this organisation was affected by the scheme, not only because all the tradespeople of Southend had to travel by railways or coaches, but because of the large number of visitors to Southend from all parts of the London area.

Mr. R. Reader Harris, M.P., who appears for the London Passengers' Association, applied to be allowed to put forward objections on behalf of the Heston & Isleworth Conservative Association and the Light Railway Transport League.

After considering these and other applications for permission to object, the Chairman ruled that, though the Tribunal had come to the unanimous conclusion that they were not entitled to be heard under one section of the Transport Act, 1947, under another section, with a view to assisting the Tribunal after the evidence had been called, these objectors could enlarge on any relevant point. The Tribunal was prepared to go further and allow them to call witness if satisfied there was something relevant that would assist the inquiry.

Mr. Wilson then returned to the witness chair to be cross-examined by Sir Shirley Worthington Evans, counsel for the City of London Corporation, who suggested that the estimates had been drawn up too much on the safe side, probably because in a period of rising costs, there was a greater tendency to add a little for safety.

Mr. Wilson, replying, said that was not the case when putting up a realistic budget. They did not allow 2 per cent. to be added for luck and he did not think they would find any margins in these budget figures. It was my experience that these budgets were extremely accurate.

### Railways Under Tight Control

Answering further questions Mr. Wilson said that the railways had been under "a very tight control" for 100 years which very few other organisations in the country had ever been subjected to. The budgetary process in the railway companies had been conducted more exactly than in any other concerns he had come across. He was a little disturbed that the Commission was not able to put anything away in 1947 and 1948 when the volume of traffic was greater than at any time in the last ten years and there was more money about.

Witness suggested that the black-coated workers, who today were substantially worse off than most others, were going to contribute largely to the building up of the reserves for the Commission, and asked whether it would not be prudent to wait until taxation had been reduced and wages unfrozen before starting to set up reserves.

Mr. Wilson thought that would be most imprudent and said he would not like to base policy on the expectation that taxation was coming down in the near future. If they got a £2 million surplus one year they would certainly have to begin thinking about reducing fares in the London area.

Mr. G. R. Rougier, for Southend Corporation and the Southend Railway Travellers' Association, questioned Mr. Wilson regarding the proposals for the equalisation of fares, and, referring to black-coated workers, suggested that the £300-£800 a year income group had been particularly hard hit during the past twelve years.

Mr. Wilson agreed that they were hard hit in relation to certain other classes. He agreed, also, that it was this class who were less free to change their job or their residence because of long service with a firm and the fact that they might be buying their house through a building society.

Turning to the question of the London, Tilbury & Southend line, Mr. Rougier asked "Whether it would be an unfair aspect of the scheme if some were asked to pay four or five times more per head than the majority?"

Mr. Wilson did not agree as they might have been in a specially privileged position in the past. They had no reason to sup-

pose it was a specially cheap line to operate. The line was a relatively profitable section because of its exceedingly high load factor and the high loads were within the London area to Upminster rather than beyond.

Mr. A. B. B. Valentine, Member of the London Transport Executive, recalled, was questioned by Mr. T. E. Morrish, London Regional Council of the Post Office Engineering Union, concerning what he called the "unfair" effect of the abolition of workmen's tickets, and he agreed that workmen's ticket users, say, on the London, Tilbury & Southend line, would be called on to pay £143,000 more. The present 526,000 workmen's ticket users in the London area would contribute a total of £1,966,827 towards the additional £3,900,000 to be raised by the scheme. It was not practicable to take into account individual hardship.

**Workmen's Fares**

Mr. K. Buckley, representing the National Council of Tenants' & Residents' Association, asked why, since the Commission objected to the principle involved in workmen's fares, did it propose to make a partial replacement of them by early morning fares, instead of withdrawing them altogether.

Mr. Valentine: Simply because, having regard to the fact that the workmen's fares are so very low, to remove them altogether would be a very drastic step to take at one time.

Mr. Buckley asked whether more complaints were made about conditions on the railways than complaints relating to disparities in charges.

Mr. Valentine agreed that this was the case. Major improvements had been made in the area, however, and the Central Line extension, together with the electrification of the line from Liverpool Street to Shenfield with its excellent rolling stock, had been completed since the war.

Mr. C. Callaghan, Twickenham Ratepayers' Association, asked why Mr. Valentine objected to the principle of workmen's tickets.

Mr. Valentine replied that he had no objection to workmen's tickets as such, but the existing practice of selling tickets at abnormally low fares in the morning to some passengers and not to others was, in the opinion of the Commission, quite indefensible.

Mr. Callaghan asked why the Commission had embarked on the conversion of South London trams to buses when in the Whitton district of Twickenham they had been waiting for a bus service for 14 years. They had been told there was a scarcity of buses.

Mr. Valentine said that, though buses were still in short supply, they were rapidly overcoming the arrears. The purchase of the buses for the South London scheme, due to begin in October, was included in the new purchases authorised by the Government for 1951-52.

Mr. Callaghan also raised the question of the reconstruction of Twickenham Station which was started in 1939 and on which work stopped with the outbreak of war. Nothing had been done since.

Mr. Valentine explained that the reconstruction of the station was in the programme of works which the Railway Executive was anxious to carry out as soon as the capital investment programme permitted. The completion of the scheme also depended on the reconstruction of the railway overbridge in London Road by the Middlesex County Council.

The Tribunal adjourned until June 1.

# Mobile Welding and Cutting Unit

*Designed for demonstration purposes*

A mobile welding and cutting unit has been introduced by the British Oxygen Co. Ltd., Cricklewood, London, N.W.2. The vehicle was designed and built by E. W. Campion & Sons Ltd., Leicester, and will be used in the first instance for demonstration purposes at agricultural shows, after which it will be available for demonstrations in the eight districts of the British Oxygen Company in the British Isles.

The outer body panels turn back horizontally to form a right-angle with the centre line of the vehicle, with an inner skin as a display area, and the canopy sections, fascia boards, and roof display are all stowed inside the vehicle on roof slides. Each piece is separated by sponge rubber, and strapped down to prevent damage; other items, including welding benches and machinery, also have their stowage spaces. In addition to a comprehensive display of welding and cutting equipment, there is a 36-in. Universal cutting machine mounted on the rear platform, and two welding stations at each side of the main body.

There is a separate power point for a lead from a portable straight line cutting machine placed on a stand clear of the canopy. Gas supply is from a battery of dissolved acetylene and oxygen cylinders located inside the stowage compartment, and secured to the forward bulkhead. A

*Display body on a modified Commer 5-ton chassis with under-floor engine*

*Lorry converted into a demonstration unit*

pipe line under the vehicle feeds the welding stations and the 36-in. cutting machine. Standard regulators are used throughout.

Eight fluorescent lights of 80 watts each are fitted, two across the ends, and three to each display area, and are fed from an internal distribution box to which an external 230-V. supply is led. The tubular cantilevers are positioned from the outside. These carry a flat plate to which are bolted the fascia boards in sections, the roof canopy being secured by bolts extending from the lower end of the fascia plates. Each section of the canopy rests on the previous one, and the design is such that erection can be completed in two hours.

## Inter-Railway Ambulance Competition

The final of the national first-aid competitions for men and women of British Railways and London Transport Railways were held at the Central Hall, Westminster, on May 19. The results were:—

| Men | Marks |
|---|---|
| Southern Region (Horsham No. 1) ... ... | 476½ |
| Southern Region (Exmouth Junction No. 2)... | 449 |
| London Midland Region (Wolverton) ... | 435½ |
| Western Region (Swindon "C") ... ... | 429½ |
| Eastern Region (March) ... ... ... | 404 |
| London Transport (Acton Works) ... ... | 403 |
| Scottish Region (Eglinton Street) ... ... | 399 |
| Scottish Region (Motherwell) ... ... | 398½ |
| Eastern Region (Nottingham Victoria) ... | 396 |
| Western Region (Bristol D.S.O.) ... ... | 393½ |
| London Midland Region (Camden "A") ... | 376 |
| North-Eastern Region (York C. & W. Works) | 369 |
| North-Eastern Region (Middlesbrough) ... | 342½ |

The challenge shield was won by Horsham, and the Corbet Fletcher trophy by Exmouth Junction.

| Women | Marks |
|---|---|
| London Transport (Baker Street) ... ... | 409 |
| Scottish Region (Glasgow) ... ... ... | 381½ |
| Western Region (Swindon) ... ... ... | 368½ |
| Eastern Region (Norwich) ... ... ... | 356 |
| Southern Region (Dorking "B") ... ... | 339 |
| London Midland Region (Horwich) ... ... | 331 |
| North Eastern Region (Newcastle Revenue) | 278 |

The Burrows rose bowl was won by London Transport (Baker Street).

Sir Eustace Missenden, Chairman of the Railway Executive, presented the awards in the absence of Lady Missenden, who was indisposed. The railways of Great Britain were an industry of speedy movement, said Sir Eustace, and there were bound from time to time to be accidents. Their safety record was accepted as a commonplace by the travelling public: in 1949, not a single passenger was killed in a train accident, and they carried 1,000 million passengers. Some 20,000 railway men and women were trained in first aid last year, of whom 3,000 were newcomers taking their first course. To the latter Sir Eustace would say "Keep at it!", for superficial knowledge might lead to errors which wider knowledge and practice would prevent; as in signalling, mistakes in first aid might be disastrous.

Unification of the railways has facilitated establishment of the Joint Advisory Council for Welfare; this, under the chairmanship of Mr. W. P. Allen, of the Railway Executive, was interesting itself in first-aid training. All classes were free to railway servants, and medical instruction and equipment were provided by the Executive, in addition to travel facilities.

Also on the platform were Sir Ernest Burdon, Receiver-General of the Order of St. John; Colonel Sir Bertram J. T. Ford, Director of the St. John Ambulance Association; and Lord Latham, Chairman of the London Transport Executive, all of whom spoke. Others present included: Sir Robert Burrows, former Chairman of the L.M.S.R.; Messrs. W. P. Allen and V. M. Barrington-Ward, Members, D. S. M. Barrie, Public Relations Officer, H. Adams Clarke, Chief Officer (Staff & Establishment), and Dr. H. H. Cavendish Fuller, Chief Medical Officer, Railway Executive; Messrs. C. K. Bird, Chief Regional Officer, Eastern Region; T. F. Cameron, Chief Regional Officer, Scottish Region; and John Elliot, Chief Regional Officer, London Midland Region, British Railways.

*Sir Eustace Missenden, Chairman, Railway Executive, presenting the shield to the Horsham (Southern Region) first-aid team (see article above)*

## The Vulcan Foundry Limited

*A satisfactory order book, but increasing competition in overseas markets during the year*

The annual general meeting of the Vulcan Foundry Limited, whose results were given in our April 14 issue, was held on May 16 at 20-24, Moorgate, London, E.C.; Mr. F. S. Whalley, Chairman & Managing Director, presided.

In his speech Mr. Whalley said that the amount of £146,866 paid in tax on profit of the year to date was no less than 44 per cent. of their manufacturing profit, and some four-and-a-half times the amount (£32,962) distributed to stockholders. The sum outstanding in respect of locomotives delivered to the Argentine railways was still considerable, and during the current year the company was due to ship fourteen locomotives in respect of a later order. Throughout the past year the matter of the settlement of their outstanding Argentine debts had been actively taken up on their behalf by the Locomotive Manufacturers' Association with various Government departments in London. Whereas the completed contracts for which the debts were owing were originally made with the British-owned railways in Argentina, the latter were subsequently taken over by the Argentine Government, on which now rested the responsibility to settle these debts.

They themselves had urged H.M. Government to assume the financial liability on behalf of the manufacturers, as the matter had passed from the commercial to the political basis. Moreover, in the case of orders now outstanding, pressure had been put upon the company, in accordance with the British Government trade policy, to take these orders at a time when satisfactory business was offering and could have been obtained in other directions. They would continue to press their case in conjunction with the representatives of the Carriage & Wagon Builders' Association; whilst they assumed that they would eventually be paid, the long period during which the debts had been outstanding was imposing an undue strain on their finances.

In recommending appropriations from the profit for the year, continued Mr. Whalley, the directors felt that, whilst there was restraint in wage increases, a response was due in the national interest to the appeal of the Chancellor of the Exchequer for a similar restraint in dividends.

### Electric Traction Development

Orders remained satisfactory, including steam locomotives for Queensland, Tasmania, the Gold Coast, and India, which should provide work for some time to come. Their work in the diesel and in the electric traction field was increasing. They were now engaged in conjunction with their friends The English Electric Co. Ltd. in building the mechanical parts of 3,000-h.p. electric locomotives for Brazil, the first of which had already successfully completed its running tests in Brazil; these were the heaviest and most powerful electric locomotives so far exported from Britain. Also in connection with The English Electric Company they were to produce the mechanical parts for electric locomotives under an important contract recently secured for Spain. Whilst a gradual decrease in requirements for steam locomotives had been foreseen, it was satisfactory that the special provision made in their works for increased

diesel and electric traction work had been fully warranted.

Mr. Whalley then referred to keen competition in the locomotive industry, not restricted to Britain. During the past year, he stated, export orders had been secured by American, French, German, and Japanese, in competition with British builders. In certain cases an offer of earlier delivery had influenced placing of the order, and there were even cases where contracts had been decided on barter terms. In order to explore railway requirements and all other possible sources of orders, their Overseas Representative, Mr. Topham, had visited South Africa, Siam, New Zealand and Australia; Mr. Collingwood, the Joint Managing Director, had visited Pakistan and Egypt; Brigadier Storar, the Vice-Chairman, had covered all South America and would return *via* U.S.A.; another Director, Major-General Davidson, had visited the Scandinavian countries; and the General Manager, Mr. Rigby, had travelled to Spain and Persia.

Referring to his own impending retirement at the end of this year, Mr. Whalley said that the chairmanship would devolve on Brigadier Storar, whilst Mr. Collingwood would be sole Managing Director.

The report and accounts were adopted.

## Questions in Parliament

**Railway Track Repairs**

Mr. A. J. Irvine (Liverpool, Edge Hill—Lab.) on May 15 asked the Minister of Transport, if in view of the necessity of ensuring the safe running of the railways, he would ensure that track repairs and modernisation of signalling were not deferred or curtailed on British Railways to reduce working costs and capital expenditure; and to what extent that had already occurred.

Mr. Alfred Barnes (Minister of Transport) stated in a written answer: Expenditure on track repairs to maintain safe running is not restricted under the Capital Investment Programme or as part of the Railways' economy campaign. Some track renewals on secondary lines have been deferred owing to cuts in capital expenditure, and speed restrictions are imposed where necessary for safety. Although signalling modernisation is not proceeding as rapidly as I or the British Transport Commission would wish, partly for the reasons which Mr. Irvine suggests, safety has shown a progressive improvement in the last two years. No passenger was killed in a train accident in 1949.

**Steel Distribution**

Mr. G. R. Mitchison (Kettering—Lab.) on May 22 asked the Minister of Supply whether he would now relax the present system of steel allocation.

Mr. George Strauss (Minister of Supply): Yes. The Government has now completed its review of the steel distribution scheme and has decided that, with the exception of sheet and tinplate, supplies of which are not yet adequate, the distribution of steel need no longer be subject to allocation or licence. Such regulation of exports of steel as may still be necessary will be effected by administrative arrangements between the Government and the steel industry. The similar administrative arrangements which now exist for regulating the distribution in the United Kingdom of certain types of tubes and pipes will continue for the time being. We shall also keep under review the distribution of other types of steel, so that, should any shortage again develop, special arrangements can be made for dealing with the situation. Statistics of the distribution of steel deliveries to the various steel consuming industries will be maintained, without burden to the consumers, simply by requiring them to quote on their orders for steel an indication of their industrial classification. Orders to give effect to these changes will be laid on the table of the House within a few days.

Mr. G. D. N. Nabarro (Kidderminster—C.): Can the Minister say whether that includes the decontrol of steel prices which have been controlled heretofore, or does it only apply to the tonnage of steel allocated?

Mr. Strauss: Only allocations. This does not affect our price regulations.


**A Message**

**From the**

**Operating and Motive Power Superintendents**

**YOUR PART IN THE SUMMER TRAIN SERVICE**

With the introduction of the Summer time table on the 5th June a number of alterations and improvements have been made and certain trains have been accelerated. The co-operation of the Staff in all grades is sought so that our Railway service may be a credit to all concerned.

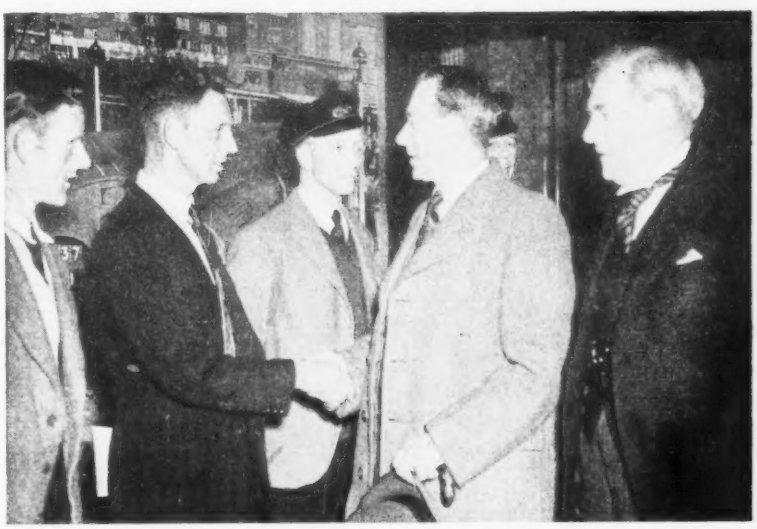
It is the little extra effort that makes all the difference to the pleasure of our patrons and the timekeeping and cleanliness of our trains, and it is felt that the whole of the Staff at stations, depots, carriage sidings and cleaning depots, etc., will desire to see that everyone using the trains has a comfortable, happy and punctual journey.

J. W. Watkins,
*Operating Superintendent*,
EUSTON.

F. W. Abraham,
*Motive Power Superintendent*,
EUSTON.


*Above is a reproduction of a message to the London Midland Region staff to appear in operating and permanent way notices during the period of the summer timetables*

### British Transport Film Première



*Mr. Alfred Barnes, Minister of Transport, and Sir Cyril Hurcomb, Chairman, British Transport Commission, with some of the cast of the British Transport films shown at the Odeon Theatre, Leicester Square, on May 18. (Editorial reference to the films is made elsewhere in this issue)*

## Staff & Labour Matters

### N.U.R. Wage Policy

Speaking at Southport on May 20, Mr. J. B. Figgins announced that the N.U.R. is to ask the T.U.C. in September to call for the immediate termination of Arbitration Order No. 1305, which requires 21 days' notice of a dispute to be given to the Minister of Labour before strike action can be taken.

"There can be no free negotiation," said Mr. Figgins, "so long as it remains. In the long run the Minister will be forced to send you to arbitration, and if you go to arbitration with the conceptions which are dominant, there is little chance of your getting any concessions whatever, unless you happen to be in the police force, or to be warders or someone concerned with defence."

A meeting has been arranged for today (Friday) between N.U.R. representatives and Sir Eustace Missenden, Chairman of the Railway Executive, in a last endeavour by the union to gain some concession for lower-paid railwaymen.

For the first time the N.U.R. has made it clear that in its claim it is concerned only with improving the lot of the lower-paid staff, and the question of relativity, so far as it affects staff above the minimum rate, is to be ignored. In this question of differentials the N.U.R. is running counter to the A.S.L.E.F. and the C.S.E.U., both of which have strongly deprecated any wage movement likely to destroy the grade differentials introduced in the railway service since the recommendations of the court of inquiry in 1947.

## Notes and News

**Draughtsmen Required.**—The Gloucester Railway Carriage & Wagon Co. Ltd., Gloucester, require the services of experienced rolling-stock draughtsmen. See Official Notices on page 611.

**Steel Axles for Pakistan.**—The High Commissioner for Pakistan invites tenders for the supply of steel axles for metre gauge locomotives, carriages and wagons. See Official Notices on page 611.

**Railway Students' Association.**—The annual general meeting of the Railway Students' Association will be held at the London School of Economics & Political Science, Houghton Street, Aldwych, W.C.2, on Wednesday, May 31, commencing at 6 p.m.

**India Store Department.**—The Director-General, India Store Department, 32, Edgware Road, London, W.2, invites tenders for the supply of forty 20-ton all-steel covered hopper wagons, bottom dump type, for transport of cement. Also for the supply of 24 all-steel, side dumping aggregate rail cars of 20-ton capacity each, for 5 ft. 6 in. gauge track. See Official Notices on page 611.

**Whitsun Holiday Train Services.**—Between May 25 and 31 there will be 864 extra main-line expresses throughout the London Midland Region, including 78 out of and 102 into Euston, and 40 from and 44 into St. Pancras; there will be 259 day, half-day and evening excursions to the sea and countryside. On the Western Region it is planned to run over 230 special trains during the period May 26 to 30; the programme of excursions includes half-day trips from a number of London suburban stations to Southampton, Bournemouth and Southend-on-Sea on Whit Sunday, and day excursions from Paddington to Bath, Bristol and Weston-super-Mare and from suburban stations to Brighton, Southend and Clacton-on-Sea on Whit Monday. The Eastern Region is running 384 additional and relief trains between May 25 and 31, 111 of which will operate on May 26.

**Gas-Turbine Locomotive.**—British Railways gas-turbine locomotive No. 18000 has been working the 3.30 p.m. Paddington to Plymouth train and the 7.15 a.m. Plymouth to Paddington on alternate days this week. The locomotive was described and illustrated in our May 5 issue.

**Mechanical Handling Exhibition.**—The second exhibition and convention organised in Britain by Mechanical Handling will be held at Olympia, London, on June 6-17, and is claimed to be the largest of its kind ever to be held. The previous exhibition was held at Olympia in July, 1948. Amongst the exhibits this year will be one demonstrating the discharge of railway wagons by tipplers. Papers will be read at the convention on various subjects, including the mechanical unloading of rail wagons, by Mr. G. W. Grossmith; jib cranes for high-speed cargo handling, by Mr. H. H. Broughton; and mobile rail type jib cranes and derricks, by Mr. Brian Neal. A film theatre will be in operation during the exhibition. Admission to the convention is by ticket available from Mechanical Handling, Dorset House, Stamford Street, London, S.E.1.

**Eastern Region Ambulance Competition.**—The winning teams in the finals of the Eastern Region Ambulance Competition, which were held at the Assembly Hall, St. Pancras Town Hall, London, N.W.1, on April 14, were March, Nottingham (Victoria) and Grimsby Docks. The prizes were presented by Mr. C. K. Bird, Chief Regional Officer, Eastern Region. Of the three winning teams, March and Nottingham (Victoria) represented the Eastern Region in the Inter-Regional Final Ambulance Competition organised by the St. John Ambulance Association at Central Hall, Westminster.

**Waterloo Busy with Liner Passengers.**—More than 1,200 passengers from the *Queen Elizabeth* arrived in London on Monday night. This was the largest number from one ship to be dealt with by the staff at Waterloo Station this year. Four boat trains brought the travellers from the liner.

**Northern Ireland Road Charges.**—In an editorial article in our May 12 issue reference was made to an increase of 10 per cent. in the Ulster Transport Authority's charges, apart from passenger traffic. As was stated in our May 5 and May 19 issues, the increase being made by the U.T.A. on June 1 is 20 per cent.

**Irish Railway Strike Threatened.**—On May 21, a meeting of railwaymen, members of the Irish Transport & General Workers' Union, in Dublin, decided to request their National Executive Council to serve a seven-day strike notice on Coras Iompair Eireann of intention to withdraw labour. The strike threat results from the dismissal of a fireman employed at Inchicore depot. Negotiations concerning the dismissal have been going on for two months.

**Last "Loch" Class Locomotive Withdrawn.**—Highland Railway 4-4-0 locomotive No. 125, now No. 14385, *Loch Tay*, which was the last of the "Loch" class to be in service, has been withdrawn and will be broken-up at Kilmarnock Works. *Loch Tay* was built in 1896 by Dübs & Company, Glasgow, to the design of Mr. David Jones, Locomotive Superintendent of the Highland Railway from 1870 until 1896. At the time of their introduction, the "Loch" class engines were the largest express passenger type on the Highland and worked on the main line between Perth and Wick. The "Lochs" were built as piston-valve engines and were fitted with Schmidt

*Mr. C. K. Bird, Chief Regional Officer, Eastern Region, at the Eastern Region Final Ambulance Competition on April 14, presenting a gift to Mr. F. Longbottom, Honorary District Secretary, Leeds* (see paragraph above)

# OFFICIAL NOTICES

THE Director General, India Store Department, 32, Edgware Road, London, W.2, invites tenders for the supply of 24 numbers of all steel, side dumping aggregate Railcars of capacity 20 tons each, for 5-ft. 6-in. track gauge, to operate on Bhakra Nangal Canal Railway. Forms of tender, which are returnable by a date to be notified later, may be obtained at the above address upon payment of a fee of 15s. Reference S.942/50 should be quoted in all applications.

LARGE Manufacturers with rapidly increasing connection on all types of railway rolling stock require Sales Departmental Manager. Excellent opportunity in an expanding business for man with wide technical and commercial knowledge of railways. Permanent post with Pension Scheme.—Box 715, *The Railway Gazette*, 33, Tothill Street, London, S.W.1.

FIRST PRINCIPLES OF RAILWAY SIGNALLING. By C. B. Byles. Most treatises on railway signalling are intended for the railway signal engineer, but this is an elementary treatise. Cloth, 7½ in. by 5 in. 146 pp. Illustrated. 4s. By post 4s. 3d. *The Railway Gazette*, 33, Tothill Street, London, S.W.1.

THE High Commissioner for Pakistan invites tenders for the supply of Steel Axles for metre-gauge locomotives, carriages and wagons. Forms of tender, which are returnable by June 27, 1950, may be obtained from The Commercial Secretary, Supply & Stores Department, 40, Lowndes Square, London, S.W.1, between the hours of 10 a.m. and 4 p.m. Mondays to Fridays, on payment of a fee of five shillings (not returnable) per tender. The reference SD. 6386 should be quoted on all applications for tender forms.

GLOUCESTER RAILWAY CARRIAGE & WAGON CO. LTD., Gloucester, require the services of experienced rolling-stock Draughtsmen. Five-day week. Staff pension scheme. Apply, stating age, details of experience, and salary required, to Chief Designer.

RAILWAY MAINTENANCE PROBLEMS. By H. A. Hull (late District Engineer, L.M.S.R.). Valuable information. With much sound advice upon the upkeep of permanent way. Cloth. 8½ in. by 5½ in. 82 pp. Diagrams. 5s. By post 5s 3d *The Railway Gazette*, 33, Tothill Street, London, S.W.1.

THE Director General, India Store Department, 32, Edgware Road, London, W.2, invites tenders for the supply of 40 numbers of 20 tons capacity all-steel covered Hopper Wagons, bottom dump type, for transport of cement. Forms of tender, which are are returnable by a date to be notified later, may be obtained at the above address upon payment of a fee of 16s. 6d. Reference S.941/50 should be quoted in all applications.

STANDARD MILITARY RAILWAY BRIDGES. By F. S. Bond. A description of the different types of bridges designed for rapid erection in the field by the Allied Forces, and of the various methods employed in such erection. 28 pages. 9 in. by 12 in. fully illustrated. Paper cover, 5s. By post 5s. 2d. *The Railway Gazette*, 33, Tothill Street, London, S.W.1.

THE FIRST PASSENGER RAILWAY. By Charles E. Lee. A history of the Swansea & Mumbles Railway, which extends over 136 years. Cloth. 8½ in. by 5½ in. 91 pp. Illustrated. 5s. By post 5s. 3d. *The Railway Gazette*, 33, Tothill Street, London, S.W.1.

piston-valve rings, but from 1899 onwards Allan balanced slidevalves were substituted. After the grouping of the railways in 1923 the class was rebuilt with "Caley" boilers.

**Indian State Railways Dinner.**—The annual Indian State Railways dinner was held on Monday last at the Rembrandt Hotel, Thurloe Place, London, S.W.7. Sir Leonard Wilson, formerly Chief Commissioner, Indian Railways, presided, and the principal speaker was Sir Edward Benthall, formerly member of the Viceroy of India's Executive Council, and Minister for War Transport. A report of the proceedings will be given in our next issue.

**B.E.T. Omnibus Services Limited.**—In the results for the year ended March 31, 1950, of British Electric Traction Omnibus Services Limited, given in our May 12 issue, comparison was incorrectly made with the previous year. Accounts for the previous period actually covered only nine months to March 31, 1949, the financial year end having been altered in 1949 from June 30 to March 31 annually. Similarly, the preference and ordinary dividends shown as 7½ and 9 per cent. respectively for the preceding year are in respect of nine months only, and equivalent to 10 and 12 per cent. for a full year.

**Scottish Region Ambulance Competition.**—Twelve teams took part in the final stage of the Scottish Region Ambulance Competition held at the Headquarters of the St. Andrew's Ambulance Association, Glasgow, on April 18. Mr. T. F. Cameron, Chief Regional Officer, Scottish Region, who presided, said he was delighted with the keen interest shown by all grades of the staff in first-aid work and that judging by the enthusiasm and efficiency of the twelve teams competing in the final of the Scottish Region Competition, there was no doubt that Scotland would be able to maintain a high position in any Inter-Regional or International Competition of the future. Custody of the Scottish Railways Challenge Shield was retained by Eglinton Street (Glasgow), and the final placings were: Eglinton Street (Glasgow), 239½; Motherwell, 236½; Perth, 233½; Falkirk, 219½; Dunfermline, 218; Glasgow (Queen Street), 217½; Bridgeton, 210½; Ladybank, 200½; Dundee (Taybridge), 199; Hurford, 196; Kilwinning, 194½; Edinburgh (Waverley), 181½ points. Mrs. T. F. Cameron, wife of the Chief Regional Officer, presented the Shield and prizes, and others taking part in the proceedings included: Mr. T. H. Moffat, Deputy Chief Regional Officer, who is President of the Council of the St. Andrew's Ambulance Association; Mr. R. Marshall, General Secretary of the St. Andrew's Ambulance Association; Mr. W. Y. Sandeman, Civil Engineer, Mr. C. H. Brazier, Regional Staff Officer, and Mr. R. F. Harvey, Motive Power Superintendent. The two leading teams competed in this year's Inter-Regional Ambulance Competition, organised by the St. John Ambulance Association, and held in the Central Hall, Westminster, on May 19.

**New Capital for East African Railways.**—The East Africa High Commission, representing the Governors of Kenya, Tanganyika, and Uganda, is raising a further £7,100,000 of 3½ per cent. inscribed stock 1966-68, of which £3,500,000 was issued in March. Of the new issue, £2,000,000 has already been placed with Government departments in London, and £500,000 in East Africa. The remaining £4,600,000 is being offered in London at £99 10s. per cent. The loan will be used mainly for the development of East African Railways & Harbours, including locomotives, rolling stock, and deep-water berths at Dar-es-Salaam. It is guaranteed for both interest and capital by the three Governments concerned.

**Wagons for Spanish Fruit Traffic.**—An agency message from Valencia states that the first 30 of a total of 500 wagons for the direct fruit traffic from Valencia are completed. They are equipped with adjustable axles to allow them to run through from the broad-gauge Spanish railways to the standard-gauge railways of the rest of Western Europe. By this means, fruit from Valencia should reach London *via* the Channel ferry, in 50 hr.

**Lancashire United Transport Limited.**—Record receipts during the year ended December 31, 1949, were reported by Mr. E. H. Edwardes, Chairman, at the annual general meeting of the Lancashire United Transport Limited on April 18. Receipts at £1,189,500 showed an increase over the previous year of £28,460. Despite this, however, profits fell by £24,835 due to rises in wages and costs. Fares in general had remained constant since before the

*Mrs. T. F. Cameron, wife of the Chief Regional Officer, Scottish Region, presenting a shield to the winning team at the Scottish Region Ambulance Competition in Glasgow, on April* 18 (*see paragraph on this page*)

war. Costs of all other commodities had risen and this tended to reduce travel. A final dividend of 10 per cent., less tax, was recommended, making 15 per cent. for the year, and also a bonus of 10 per cent., less tax, as for the preceding year, which would allow £264,807 to be carried forward, against £215,776.

**London Midland Region Music Hall.**—The music hall show presented by British Railways, London Midland Region, staff magazine at Crewe on May 12, in aid of the Old Railway Veterans Reunion, comprised 14 acts by railway men and women of the Region. The programme included an escapology turn by Mr. Frank Cooper, engine driver, and his wife; acrobatics by Mr. Charles Hancock, of the Carriage & Wagon Department, Crewe, and his four children; comedy by Mr. Tommy Miles, shunter, Mr. Freddy Nixon, Goods Department, Congleton, Mr. Harry Ainsworth, clerk (who also stage managed the show), and Mr. Jack Ody, porter, acting as compere. Singing turns were by Mr. Arthur Lloyd and Miss Yvonne Allen, and Mr. Len Rathbone and Miss Hazel Norman; Mr. Albert Tinkler, clerk, acted as accompanist for all the turns, and gave a piano solo.

**Railway Civil Engineering Exhibition.**—An exhibition of railway civil engineering was opened on May 23 by Sir Eustace Missenden, Chairman of the Railway Executive, at the Institution of Civil Engineers, Great George Street, Westminster. It is a survey of the work of the railway civil engineer from the earliest days of railways, and has been organised jointly by the Institution of Civil Engineers and British Railways. It marks the year of Presidency of the Institution of Mr. V. A. M. Robertson, Chief Civil Engineer, Southern Region, the first railway civil engineer to receive this honour for 21 years, and is also designed to show the public something of the work of the railway civil engineer. There are contemporary colour prints and working drawings of early railways and up-to-date photographs, models, plans and apparatus. Among those at the opening ceremony were: Mr. V. A. M. Robertson, President of the Institution of Civil Engineers; Messrs. V. M. Barrington-Ward, and J. C. L. Train, and General Sir Daril G. Watson, Members, Railway Executive; Mr. D. S. M. Barrie, Public Relations Officer, Railway Executive; Mr. G. Dow, Public Relations & Publicity Officer, London Midland Region; Major M. J. M. Dewar, Public Relations & Publicity Officer, Western Region; and Mr. C. Grasemann, Public Relations & Publicity Officer, Southern Region. The exhibition is open to the public, admission free, on weekdays, including Whit Monday, until June 3, from 10 a.m. to 6 p.m. (Tuesday and Thursdays to 8 p.m.).

## Forthcoming Meetings

June 1 (*Thu.*) to June 4 (*Sun.*).—Institute of Traffic Administration. Annual conference at Kingsley Hotel, Bloomsbury, London, W.C.1.

June 2 (*Fri.*).—Scottish Society of Students of the Locomotive, at the Board Room, 302, Buchanan Street, Glasgow, C.2, at 7.30 p.m. "Combustion and Controlled Firing," by Mr. L. C. Wellbom.

June 6 (*Tue.*) to 17 (*Sat.*).—Mechanical Handling Exhibition, at Olympia, London.

# Railway Stock Market

THE strength of British Funds has dominated stock markets and diverted attention from other sections, and business in industrial shares remained on a limited scale, though individual features of strength were not lacking. There was a fair amount of activity in foreign rails with United of Havana stocks prominent and Leopoldina again reflecting moderate selling; this however was partly offset by fresh buying by those attracted by the fact that current prices are below estimated pay-outs for the various stocks. The strength of gilt-edged was due to a number of factors. It is generally assumed that interest rates, which have been trending upwards ever since the beginning of 1948, are unlikely to continue to this trend, and that a period of stability has probably been reached. The premium of 11s. 3d. now established by the new 3½ per cent. British Electricity stock has helped sentiment, as have the terms of the new East Africa 3½ per cent. issue. Moreover, about the middle of June some £20,000,000 of British Coal stock is expected to be issued to provide interim compensation for colliery companies; this latest addition to nationalisation stocks will probably also be a 3½ per cent. issue offered at slightly under par. At the time of going to press the 3 per cent. British Transport stock (1979-88) has risen to 90⅜, and proportional rises have been recorded by the other Transport stocks, which of course move very closely with the general trend in gilt-edged.

United of Havana 1906 debentures fluctuated, but have since rallied to 26, while Cuban Central debentures changed hands up to 59 and Havana Terminal 5 per cent. mortgage debentures up to 100½. No further news of fresh developments is available as to take-over moves, but the market remains hopeful of an official statement before long. Optimists hope that the 1906 debentures may eventually prove to be worth at least 30; but estimates of this kind are quite unofficial, and buyers of all classes of United of Havana stocks must realise that speculative risk is involved until official take-over terms are finally settled.

Leopoldina ordinary changed hands actively around 9½; the preference was firmer at close on 26, while the 4 per cent. and 6½ per cent. debentures were 93 and 134 respectively. Leopoldina Terminal debentures eased to 88½ and the ordinary units were 1s. 7½d. Steadiness has been shown by Great Western of Brazil at 145s. Elsewhere, activity in San Paulo 10s. units was a feature, the price improving to 17s. 4½d. Antofagasta kept at 7½ and the preference stock at 41½. Brazil Rail gold bonds have firmed up to 42¼. Manila "A" debentures were 86 and the preference shares were 8s. 6d.

Nitrate Rails moved up to 75s. White Pass Yukon income debentures have changed hands around 70, and Algoma Central Hudson Bay 5 per cent. first income debentures were 140. Canadian Pacifics, after easing, rallied to 29¼. Among French railway sterling bonds, Nord strengthened to 102.

There was little business in road transport shares, which have remained firmly held. Southdown were 117s. 6d., West Riding 58s., and Lancashire Transport 78s., while B.E.T. deferred stock rallied to 440.

Iron and steel shares showed a firmer trend, partly due to the industry's satisfaction with the Government decision to end steel rationing (except for steel sheets and tinplate). Moreover, there is general confidence that no attempt will be made to finalise iron and steel nationalisation during the present Parliament, and that the whole question of steel nationalisation will be left for the next general election, to be held (it is generally believed) this year. This largely explains why investors are adopting a waiting attitude as far as industrial shares are concerned; and why investment money is going mainly into British Funds at the present time. After the election it might be much easier to assess the investment outlook for industrial shares.

Among iron and steels, Guest Keen have rallied strongly to 42s. 6d., United Steel were 25s. 9d., and Stewarts and Lloyds 54s. 10½d. Vickers were 28s. 9d., being favoured in anticipation of next Wednesday's annual meeting. Locomotive building and engineering shares became more active with Vulcan Foundry at 20s., Beyer Peacock better at 21s. 4½d., and North British Locomotive 17s. 10½d. Gloucester Wagon gained 6d. at 48s. 6d. Birmingham Wagon were 28s., Wagon Repairs 5s. shares 16s. 9d., Hurst Nelson 57s. 6d., Charles Roberts 81s. 9d. and North Central Wagon 12s. 6d.

## Traffic Table of Overseas and Foreign Railways

| | Railway | Miles open | Week ended | Traffics for week: Total this year | Traffics for week: Inc. or dec. compared with 1947/48 | No. of week | Aggregate traffics to date: Total 1948/49 | Aggregate traffics to date: Increase or decrease |
|---|---|---|---|---|---|---|---|---|
| | | | | £ | £ | | £ | £ |
| South & Central America | Antofagasta ... | 811 | 14.5.50 | 66,560 | — 220 | 19 | 1,156,444 | — 126,660 |
| | Costa Rica ... | 281 | Mar., 1950 | c991,660 | — c106,988 | 39 | c7,596,462 | — c1,523,421 |
| | Dorada ... | 70 | Apr., 1950 | 39,295 | + 9,554 | 17 | 165,766 | + 45,455 |
| | Inter. Ctl. Amer. ... | 794 | Mar., 1950 | $1,310,388 | + $114,029 | 13 | $3,778,654 | + $493,309 |
| | La Guaira ... ... | 22¼ | Apr., 1950 | $81,912 | — $40,809 | 17 | $345,161 | — $107,313 |
| | Nitrate ... ... | 382 | 15.5.50 | 19,370 | + 769 | 19 | 178,948 | + 21,121 |
| | Paraguay Cent. ... | 274 | 12.5.50 | £199,342 | + £89,425 | 45 | £6,650,797 | + £1,978,858 |
| | Peru Corp. ... | 1,050 | Apr., 1950 | $4,263,000 | — $461,658 | 43 | $57,660,058 | + $16,899,941 |
| | ,, (Bolivian Section) | 66 | Apr., 1950 | Bs. 10,165,000 | + Bs. 1,158,770 | 43 | Bs. 97,511,664 | + Bs. 11,761,937 |
| | Salvador ... ... | 100 | Febr., 1950 | c239,000 | — c72,000 | 35 | c1,300,000 | — c139,000 |
| | Taltal ... ... | 154 | Apr., 1950 | 18,280 | + 10,365 | 43 | 138,920 | + 50,665 |
| Canada | Canadian National† | 23,473 | Mar., 1950 | 14,955,000 | + 1,143,000 | 13 | 38,890,000 | + 341,000 |
| | Canadian Pacific† ... | 17,037 | Mar., 1950 | 10,743,000 | + 446,000 | 13 | 27,726,000 | — 793,000 |
| Various | Barsi Light* ... | 167 | Mar., 1950 | 34,522 | + 3,022 | 52 | 358,762 | + 22,275 |
| | Egyptian Delta ... | 607 | 10.4.50 | 17,780 | — 2,730 | 1 | 17,780 | — 2,730 |
| | Gold Coast... ... | 536 | Feb., 1950 | 234,159 | — 6,199 | 48 | 2,547,700 | + 163,306 |
| | Mid. of W. Australia | 277 | Mar., 1950 | 33,778 | + 3,481 | 39 | 275,873 | + 15,568 |
| | Nigeria ... ... | 1,900 | Jan., 1950 | 502,360 | + 38,978 | 44 | 5,017,814 | + 266,573 |
| | South Africa ... | 13,347 | 22.4.50 | 1,607,872 | + 216,069 | 3 | 4,835,856 | + 368,509 |
| | Victoria ... ... | 4,744 | Jan., 1950 | 2,000,259 | + 490,658 | 31 | — | — |

* Receipts are calculated @ 1s. 6d. to the rupee

† Calculated at $3 to £1